This printed version of the Schedule of Classes is current as of 5/28/19 10:54 AM.

AASP African American Studies Spring 2019

AASP100 **Introduction to African American Studies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS, DVUP

Significant aspects of the history of African Americans with particular emphasis on the evolution and development of black communities from slavery to the present. Interdisciplinary introduction to social, political, legal and economic roots of contemporary problems faced by blacks in the United States with applications to the lives of other racial and ethnic minorities in the Americas and in other societies.

0101	Shane Walsh MWF 10:00am - 10:50am	Seats (Total: 35) JMZ 2206
0102	Shane Walsh MWF 12:00pm - 12:50pm	Seats (Total: 35) SQH 1107
0103	Jonathan England TuTh 11:00am - 12:15pm	Seats (Total: 30) SQH 1121
0104	Jonathan England TuTh 12:30pm - 1:45pm	Seats (Total: 30) SQH 1121
0105	Jason Nichols TuTh 11:00am - 12:15pm	Seats (Total: 35) SQH 1103
0106	Jason Nichols TuTh 2:00pm - 3:15pm	Seats (Total: 35) PLS 1113
0107	Shane Walsh MWF 2:00pm - 2:50pm	Seats (Total: 35) TYD 0102

AASP100H **Introduction to African American Studies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS, DVUP

Significant aspects of the history of African Americans with particular emphasis on the evolution and development of black communities from slavery to the present. Interdisciplinary introduction to social, political, legal and economic roots of contemporary problems faced by blacks in the United States with applications to the lives of other racial and ethnic minorities in the Americas and in other societies.

Restricted to HONR students only.

0103	Jonathan England TuTh 11:00am - 12:15pm	Seats (Total: 5) SQH 1121
0104	Jonathan England TuTh 12:30pm - 1:45pm	Seats (Total: 5) SQH 1121

AASP101 **Public Policy and the Black Community**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

Formerly: AASP300.

The impact of public policies on the black community and the role of the policy process in affecting the social, economic and political well-being of minorities. Particular attention given to the post-1960 to present era.

0101	Alana Hackshaw TuTh 11:00am - 12:15pm	Seats (Total: 32) SQH 2120

AASP187 **The New Jim Crow: African-Americans, Mass Incarceration and the Prison Industrial Complex**

Credits: 3 | Grading Method: Regular, Pass-Fail | General Education: DSHS, DVUP, SCIS

Recommended: AASP100.

Students will examine the birth of the racial caste system following the abolition of slavery, the parallels between the racial hierarchy of the Jim Crow system and contemporary mass incarceration, and the rise of the prison industrial complex as a multi-billon business which thrives on the oppression of low-income populations and poor communities of color.

0101	Joseph Richardson TuTh 3:00pm - 4:15pm	Seats (Total: 60) SYM 0200

AASP200 **African Civilization**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU

A survey of African civilizations from 4500 B.C. to present. Analysis of traditional social systems. Discussion of the impact of European colonization on these civilizations. Analysis of the influence of traditional African social systems on modern African institutions as well as discussion of contemporary processes of Africanization.

0101	George Kintiba MW 11:00am - 12:15pm	Seats (Total: 40) ASY 3207

AASP202 **Black Culture in the United States**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS, DVUP

The course examines important aspects of African American life and thought which are reflected in African American literature, drama, music and art. Beginning with the cultural heritage of slavery, the course surveys the changing modes of black creative expression from the 19th-century to the present.

0101	Renina Jarmon MWF 11:00am - 11:50am	Seats (Total: 35) SQH 1107
0201	Renina Jarmon MWF 1:00pm - 1:50pm	Seats (Total: 35) SKN 1115
0301	Robert Choflet TuTh 11:00am - 12:15pm	Seats (Total: 30) SQH 1107
0401	Robert Choflet TuTh 2:00pm - 3:15pm	Seats (Total: 35) SYM 0215

AASP202H **Black Culture in the United States**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS, DVUP

The course examines important aspects of African American life and thought which are reflected in African American literature, drama, music and art. Beginning with the cultural heritage of slavery, the course surveys the changing modes of black creative expression from the 19th-century to the present.

0101	Robert Choflet TuTh 11:00am - 12:15pm	Seats (Total: 5) SQH 1107

AASP274 **Creative Writing Through The Eyes of African Americans: A Beginning Workshop**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Restriction: Must not have completed ENGL271, ENGL274, ENGL294,or AASP274. Also offered as: ENGL274. Credit only granted for: ENGL274 or AASP274.

Introduction to theory and practice of writing fiction, drama and poetry, with an emphasis on African American literary models. Critical reading, exercises and workshop discussions with continual reference to modeling, drafting, and revising as necessary stages in a creative process.

0101	Dorothy Phaire TuTh 9:30am - 10:45am	Seats (Total: 20) NCC 0120

AASP297 **Research Methods in African American Studies**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AASP101 or AASP202. Restriction: Must be in African American Studies program. Credit only granted for: AASP297 or AASP299R. Formerly: AASP299R.

Introduces African American Studies majors to the basic research skills methodologies, sources, and repositories for studying African Diaspora. Students will be required to select a research topic, write a research proposal, develop an annotated bibliography, and in the process will be prepared for completing their senior thesis or other significant writing projects necessary to fulfill the requirements of the major.

0101	Sharon Harley TuTh 2:00pm - 3:15pm	Seats (Total: 20) TLF 1102

AASP298A **Special Topics in Afro-American Studies: African-American History, 1865 - Present**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS

0101	Elsa Barkley Brown TuTh 9:30am - 10:45am	Seats (Total: 35) KEY 1117

AASP298B **Special Topics in African American Studies; Construction of Manhood and Womanhood in the Black Community**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DVUP

An introductory multi-disciplinary and inter-disciplinary educational experience to explore issues relevant to black life, cultural experiences, and political, economic, and artistic development.

Also offered as WMST265. Credit granted for AASP298B or WMST265.

0101	Dennis Doster W 4:00pm - 6:30pm	Seats (Total: 30) KEY 0125

AASP298D **Special Topics in African American Studies; African-American Health Disparities and Social Justice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introductory multi-disciplinary and inter-disciplinary educational experience to explore issues relevant to black life, cultural experiences, and political, economic, and artistic development.

Also offered as HLTH298D and SOCY298D. Credit granted for AASP298D, HLTH298D or SOCY298D.

0101	Caryn Bell MW 2:00pm - 3:15pm	Seats (Total: 35) HBK 0105

AASP298F **Special Topics in African American Studies; Caribbean Film and Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introductory multi-disciplinary and inter-disciplinary educational experience to explore issues relevant to black life, cultural experiences, and political, economic, and artistic development.

Contact department for information to register for this course.

AASP298L **Special Topics in Afro-American Studies: African-American Literature and Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Also offered as ENGL234. Credit granted for AASP298L or ENGL234.

0101	Dominique Young TuTh 12:30pm - 1:45pm	Seats (Total: 30) TWS 0214
0102	Steve Beaulieu MWF 10:00am - 10:50am	Seats (Total: 30) KEY 0102

AASP298Z **Special Topics in African American Studies; Jazz as a Cultural Art Form**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introductory multi-disciplinary and inter-disciplinary educational experience to explore issues relevant to black life, cultural experiences, and political, economic, and artistic development.

0101	Ronald Zeigler M 2:00pm - 4:30pm	Seats (Total: 43) NCC 0130

AASP299T **Selected Topics in African American Studies; Elementary Twi II**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

An introductory multi-disciplinary academic exploration of the cultural, political, and economic issues relevant to Africans and African-Americans.

This is a language course designed to provide basic communicative competence in oral Twi for beginners. We will begin by introducing students to the Ghanaian culture. As we advance through the course, you will notice that we place less emphasis on formal grammatical instruction and more emphasis on everyday speech. This is because we want to prepare you for an everyday conversation with family and friends. Through weekly lessons and activities, we hope to build your confidence when speaking Twi and also help you build a community with other students on campus.

0101	George Kintiba F 3:00pm - 4:40pm	Seats (Total: 25) WDS 0104

AASP303 **Computer Applications in African American Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: STAT100, MATH107, MATH111, or SOCY201; or students who have taken courses with comparable content may contact the department.

Introduction to statistics and database processing software used in model estimation and simulation in policy analysis. Special emphasis on applications for applied research on policy problems confronting minority communities.

0101	Tainya Clarke TuTh 5:30pm - 6:45pm	Seats (Total: 20) KEY 0119

AASP305 **Theoretical, Methodological and Policy Research Issues in African American Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AASP301; and (STAT100, MATH111, PSYC200, BMGT230, or SOCY201). Or students who have taken courses with comparable content may contact the department. Formerly: AASP401.

Theories and concepts in the social and behavioral sciences relating to problems in minority communities. Issues include validity and soundness of theoretical arguments, epistemological questions of various methodologies and the relationship between policy making and policy research.

0101	Ricco Hall W 5:00pm - 7:30pm	Seats (Total: 30) JMZ 3205

AASP310 **African Slave Trade**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AASP202 or AASP100; or permission of BSOS-African American Studies department. Formerly: AASP311.

The relationship of the slave trade of Africans to the development of British capitalism and its industrial revolution; and to the economic and social development of the Americas.

0101	George Kintiba W 2:00pm - 4:30pm	Seats (Total: 35) PLS 1111

AASP386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Permission of BSOS-African American Studies department; and junior standing or higher.

0101	Marshal Washington W 10:00am - 12:30pm	Seats (Total: 10) TLF 1102

AASP395 **Fundamentals of Quantitative Research in Socio-Cultural Perspective**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in African American Studies program; and junior standing or higher.

Introduction to quantitative methods for African American Studies major in the cultural and social analysis concentration. Basics of survey design and experimental design and data analysis and use of statistical software programs.

0101	Cecily Hardaway TuTh 3:30pm - 4:45pm	Seats (Total: 20) TLF 1101

AASP396 **Independent Study Non-Thesis Option**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: AASP386 and AASP297. Restriction: Must be in African American Studies program. Credit only granted for: AASP396 or AASP397.

A research seminar that allows African American Studies majors to complete an independent study research project in lieu of completing the AASP397: Senior Thesis. Students will examine various concepts of race, gender, labor and ethnicity in the seminar lecture component to be applied toward their specific research projects.

0101	Angel Dunbar	Seats (Total: 10)
	M 3:30pm - 6:00pm	TLF 1102

AASP397 **Senior Thesis**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of BSOS-African American Studies department.

Directed research in African American Studies resulting in the completion and defense of a senior thesis.

Contact department for information to register for this course.

AASP398C **Selected Topics in the African Diaspora**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the historical experiences and cultures of Africans in the diaspora.

Also offered as ENGL317 and AMST328U. Credit granted for AASP398C, AMST328U or ENGL317.

0101	Julius Fleming	Seats (Total: 27)
	MW 5:00pm - 6:15pm	TWS 0221

AASP398D **Selected Topics in the African Diaspora; Issues in African Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the historical experiences and cultures of Africans in the diaspora.

Also offered as GEOG398A, GVPT359F, and SOCY398Y. Credit only granted for AASP398D, GEOG398A, GVPT359F, or SOCY398Y.

0101	Sangeetha Madhavan	Seats (Total: 20)
	W 2:00pm - 4:30pm	HBK 0108

AASP398G **Selected Topics in the African Diaspora; Gender, Labor, and Racial Identity in Diaspora Communities**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the historical experiences and cultures of Africans in the diaspora.

Also offered as AMST328K. Credit only granted for AASP398G or AMST328K.

0101	Sharon Harley	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	WDS 1130

AASP398Q **Selected Topics in the African Diaspora; Black Baltimore in the Post Racial U.S.: African American Urban Culture in the Age of Obama**

Credits: 3 Grading Method: Regular

Analysis of the historical experiences and cultures of Africans in the diaspora.

Also offered as AMST328M. Credit only granted for AASP398Q or AMST328M.

0101	Robert Choflet	Seats (Total: 35)
	Th 4:00pm - 6:30pm	WDS 1114

AASP398Z **Selected Topics in the African Diaspora; Black Contributions to History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the historical experiences and cultures of Africans in the diaspora.

This course is an in-depth quest of Africa's contributions to humanity in sciences and philosophy from Egyptian antiquity to the scramble of Africa era. It will enlighten students to the undeniable African discoveries in various areas of scholarship and their stolen legacy. It will also allow students to appreciate numerous African unacknowledged achievements and reveal the premises of a new philosophy largely founded on the sciences and scientific experience, which could, perhaps one day, reconcile humanity to itself.

0101	George Kintiba	Seats (Total: 35)
	M 2:00pm - 4:30pm	ASY 3211

AASP402 **Classic Readings in African American Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AASP202 or AASP100.

Classic readings of the social, economic and political status of blacks and other minorities in the United States and the Americas.

0101	Sangeetha Madhavan	Seats (Total: 30)
	TuTh 9:30am - 10:45am	SQH 1107

AASP441 **Science, Technology, and the Black Community**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Prerequisite: HIST255, AASP202, or AASP100; or permission of BSOS-African American Studies department.

Scientific knowledge and skills in solving technological and social problems, particularly those faced by the black community. Examines the evolution and development of African and African American contributions to science. Surveys the impact of technological changes on minority communities.

0101	Jerry Semper	Seats (Total: 40)
	W 4:00pm - 6:30pm	SQH 1103

AASP443 **Blacks and the Law**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Prerequisite: HIST255, AASP202, or AASP100; or permission of BSOS-African American Studies department.

The relationship between black Americans and the law, particularly criminal law, criminal institutions and the criminal justice system. Examines historical changes in the legal status of blacks and changes in the causes of racial disparities in criminal involvement and punishments.

0101	Joseph Clark	Seats (Total: 35)
	W 6:00pm - 8:30pm	HBK 0105

AASP478L **Humanities Topics in African American Studies; Literature and the Shaping of the Caribbean**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced studies in the humanities, often requiring prerequisites, focusing on the literary, artistic and philosophical contributions of Africans and African Americans.

Contact department for information to register for this course.

AASP478N **Humanities Topics in African American Studies; African-American Literature: 1910-1945**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced studies in the humanities, often requiring prerequisites, focusing on the literary, artistic and philosophical contributions of Africans and African Americans.

Also offered as ENGL471. Credit granted for ENGL471 or AASP478N.

0101	Laura Williams	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	TWS 1106

AASP498F **Special Topics in Black Culture; Women in Caribbean**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced study of the cultural and historical antecedents of contemporary African and African American society. Emphasis on the social, political, economic and behavioral factors affecting blacks and their communities. Topics vary.

Contact department for information to register for this course.

AASP498J **Special Topics in Black Culture; Black Feminist Science Studies**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced study of the cultural and historical antecedents of contemporary African and African American society. Emphasis on the social, political, economic and behavioral factors affecting blacks and their communities. Topics vary.

Also offered as AASP498J. Credit only granted for WMST428J or AASP498J. We will examine the ways in which scientific knowledge has historically been shaped by cultural ideas of race and gender and how black feminist approaches to science offer alternative modes of knowledge production. We will explore the history of scientific racism, eugenics, the Black Women's Health Imperative, the search for African roots using direct- to-consumer genealogy testing, and contemporary case studies on gendered and racialized medicine in the fields of genomics, pharmacology, assisted reproduction.

0101	Jessica Mathiason	Seats (Total: 30)
	MW 3:30pm - 4:45pm	TYD 0111

AASP498K **Special Topics in Black Culture; Black Masculinities in Art, Music, and Dance**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced study of the cultural and historical antecedents of contemporary African and African American society. Emphasis on the social, political, economic and behavioral factors affecting blacks and their communities. Topics vary.

Also offered as AMST429D. Credit only granted for AASP498K or AMST429D.

0101	Jason Nichols	Seats (Total: 35)
	Tu 4:00pm - 6:30pm	SQH 1107

AASP498W **Special Topics in Black Culture; Washington and Prince George's History, Culture, and Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced study of the cultural and historical antecedents of contemporary African and African American society. Emphasis on the social, political, economic and behavioral factors affecting blacks and their communities. Topics vary.

0101	Jonathan England	Seats (Total: 45)
	Tu 3:30pm - 6:00pm	KEY 0116

AAST Asian American Studies Spring 2019

AAST200 **Introduction to Asian American Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB, D General Education: DSHS, DVUP

The aggregate experience of Asian Pacific Americans, from developments in the countries of origin to their contemporary issues. The histories of Asian Pacific American groups as well as culture, politics, the media, and stereotypes, viewed from an interdisciplinary perspective.

Also offered as AMST298C. Credit granted for AAST200 or AMST298C.

0101	Julie Park	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	SQH 1101

AAST201 **Asian American History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS, DVUP

Also offered as: HIST221. Credit only granted for: AAST201 or HIST221.

Introduction to the history of Asian Americans and Asians in the United States and the Americas and to the field of Asian American Studies, from an interdisciplinary perspective. Topics include theories of race and ethnicity; Asian migration and diaspora to the Americas; Asian American work and labor issues; gender, family, and communities; nationalism and nativism, and anti-Asian movements; Asian Americans in World War II, the Cold War, and the issues in the civil rights & post-civil rights era.

0101	Terry Park	Seats (Total: 60)
	TuTh 11:00am - 12:15pm	SQH 1119

AAST233 **Introduction to Asian American Literature**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU, DVUP

Also offered as: ENGL233. Credit only granted for: ENGL233 or AAST233.

A survey of Asian American literature with an emphasis on recurrent themes and historical context.

0101	Andy Yeh	Seats (Total: 30)
	TuTh 9:30am - 10:45am	TWS 0214

AAST378 **Experiential Learning**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Field experience/internship in professional organizations and appropriate private and governmental agencies serving the Asian American community.

0101	Julie Park	Seats (Total: 2)
	Contact instructor or department for details.	

AAST388 **Independent Research**

(Perm req)

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Directed, independent study in Asian American Studies resulting in the completion of an original research paper.

Prerequisite: permission of department.

0101	Julie Park	Seats (Total: 2)
	Contact instructor or department for details.	

0201	Terry Park	Seats (Total: 2)
	Contact instructor or department for details.	

AAST398C **Selected Topics in Asian American Studies; Politics of Transnational Adoption: Intersectional Analysis of Class, Race, Gender and Nationality**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Study of a specific theme or issue involving the Asian America experience.

Also offered as WMST379C. Credit only granted for WMST379C or AAST398C. In this course we will examine the political, economic, and cultural impetus and the consequences of the movement of children across national borders from diverse perspectives. By considering racial, class, gender, and national hierarchies at the global scale, we will explore the factors that have maintained transnational adoption between South Korea and the United States for over sixty years. We will also examine the causes, processes, and results of transnational adoption between China and the United States.

0101	Sina Lee	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ASY 3215

AAST398E **Selected Topics in Asian American Studies; Growing Up Asian American: The Asian Immigrant Family and the Second Generation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Study of a specific theme or issue involving the Asian America experience.

0101	Jia Li Liu	Seats (Total: 26)
	TuTh 2:00pm - 3:15pm	SQH 1111

AAST398J **Selected Topics in Asian American Studies; New World Arrivals: Literature of Asian American Migration and Diaspora**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Study of a specific theme or issue involving the Asian America experience.

Also offered as ENGL349J. Credit granted for AAST398J or ENGL349J.

0101	Edlie Wong	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	TWS 1107

AAST398M **Selected Topics in Asian American Studies; Asian Americans and Media**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP, DVUP

Study of a specific theme or issue involving the Asian America experience.

From yellow peril invaders to model minority allies, Asian Americans have crafted their own dynamic cultural expressions in a number of media from film, television, and music to fashion, sports, and foodthat reveal and contest the contradictions of the U.S. nation-state. Asian American culture also uniquely sits at the nexus of immigration flows and digital technologies, providing a transnational lens to view the US place in the world. This advanced course, then, will introduce students to the study and practice of Asian American culture as multiple, hybrid, and heterogeneous. It will do so through three sections: section one will introduce students to classic cultural and media concepts as well as relevant keywords outlined by Asian American Studies scholars; section two will review the work of Asian American cultural theorists; section three will focus on analyses of particular Asian American cultural productions. In doing so, students will gain an understanding of the shifting and interlocking tensions among the local, the national, and the global that form the cultural geographies of Asian America.

0101	Terry Park	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	SQH 2120

AAST398R **Selected Topics in Asian American Studies; Cultural Imagination in the US-China Relations since 1785**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Study of a specific theme or issue involving the Asian America experience.

Also offered as HIST428F. Credit granted for HIST428F or AAST398R.

0101	James Gao	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	KEY 0100

AAST443 **Asian American Politics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP

Credit only granted for: AAST498T, AAST443, GVPT368C or AMST 498J. Formerly: AAST498T.

Students will gain a greater understanding of 1)the role of Asian Americans in US politics, 2) the political attitudes and behaviors of Asian Americans and 3)how to conduct research on Asian American politics. Though the class will concentrate on Asian Americans, issues related to Asian American politics will be examined within the larger context of America's multicultural political landscape.

Also offered as AMST498J. Credit granted for AAST443 or AMST498J.

0101	Janelle Wong MW 11:00am - 12:15pm	Seats (Total: 40) TWS 1107

AAST498F **Advanced Topics in Asian American Studies; Asian American Oral History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced study of the cultural and historical antecedents of contemporary Asian American society. Emphasis on the social, political, economic, and behavioral factors affecting Asian Americans and their communities.

An advanced topics course to understand, explore, analyze, practice, and present Asian American oral histories. An introduction to the general field, methodology, and importance; listen, read, and analyze examples of Asian American oral histories; and then conduct and share an oral history interview of a local Asian American. Course questions: how can Asian American oral histories illuminate larger global, national, and regional forces such as war, empire, militarism, capitalism, racism, and other forms of state violence? How can they illustrate different forms of resistance to these same forces? What are some of the ethical, socially-just practices we must maintain when listening, preserving, and circulating them? And how can these questions, practices, and processes help us be better listeners, members, and actors in our communities?

0101	Terry Park W 5:00pm - 7:30pm	Seats (Total: 20) SQH 1123

AAST498M **Advanced Topics in Asian American Studies; Asian American Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Advanced study of the cultural and historical antecedents of contemporary Asian American society. Emphasis on the social, political, economic, and behavioral factors affecting Asian Americans and their communities.

Also offered as AMST418N. Credit granted for AMST418N or AAST498M.

0101	Philip Nash M 5:00pm - 7:30pm	Seats (Total: 20) JMZ 1226

AAST498Q **Advanced Topics in Asian American Studies; Native Hawaiian Pacific Islander Studies**

Credits: 3 Grading Method: Regular, Audit

Advanced study of the cultural and historical antecedents of contemporary Asian American society. Emphasis on the social, political, economic, and behavioral factors affecting Asian Americans and their communities.

Through a case study approach, students will gain an understanding of (1) the indigenous people of Hawaii and the U.S. affiliated Pacific Islands, (2) the impact of their historical and current relationship with the American imperialism and the U.S. government, and (3) their impact on demographic change in the U.S.

0101	Gemirald Daus	Seats (Total: 20)
	Tu 5:00pm - 7:30pm	SQH 2120

AGNR Agriculture and Natural Resources Spring 2019

AGNR301 **Sustainability**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as: PLCY301. Credit only granted for: AGNR301, PLCY301 or PUAF301.

Designed for students whose academic majors would be enhanced by the complementary study of a widely shared but hard-to-operationalize aspiration: that present choices should preserve or improve future options rather than foreclose or degrade them. How should we understand sustainability? How might we achieve it? How would we know if we had achieved it? And how could sustainability activists of a rising generation lead by example?

0101	Daria Scala	Seats (Total: 130)
	TuTh 12:30pm - 1:45pm	SHM 2102

AGNR388 **Honors Thesis Research**

(Perm req)

Credits: 3-6 Grading Method: Regular

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

0101	Evelyn Cooper	Seats (Total: 20)
	Contact instructor or department for details.	

AMSC Applied Mathematics & Scientific Computation Spring 2019

AMSC420 **Mathematical Modeling**

(Perm req) Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461); and 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (MATH246, MATH341); and minimum grade of C- in STAT400. And 1 course with a minimum grade of C- from (CMSC106, CMSC131); or students who have taken courses with comparable content may contact the department. Also offered as: MATH420. Credit only granted for: AMSC420 or MATH420.

The course will develop skills in data-driven mathematical modeling through individual and group projects. Emphasis will be placed on both analytical and computational methods, and on effective oral and written presentation of results.

0101	Charles Levermore TuTh 11:00am - 12:15pm	Seats (Total: 28) CSI 4122

AMSC460 Computational Methods

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241); and 1 course with a minimum grade of C- from (CMSC106, CMSC131); and minimum grade of C- in MATH246. Also offered as: CMSC460. Credit only granted for: AMSC460, CMSC460, AMSC466, or CMSC466.

Basic computational methods for interpolation, least squares, approximation, numerical quadrature, numerical solution of polynomial and transcendental equations, systems of linear equations and initial value problems for ordinary differential equations. Emphasis on methods and their computational properties rather than their analytic aspects. Intended primarily for students in the physical and engineering sciences.

0101	Akwum Onwunta MWF 1:00pm - 1:50pm	Seats (Total: 30) MTH 0305
0201	Juan Pablo Borthagaray TuTh 9:30am - 10:45am	Seats (Total: 34) PHY 0405
0301	Doron Levy TuTh 11:00am - 12:15pm	Seats (Total: 34) MTH 0303
0401	Heyrim Cho TuTh 12:30pm - 1:45pm	Seats (Total: 25) MTH 1311

AMSC466 Introduction to Numerical Analysis I

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241); and 1 course with a minimum grade of C- from (CMSC106, CMSC131); and minimum grade of C- in MATH410. Also offered as: CMSC466. Credit only granted for: AMSC460, CMSC460, AMSC466, or CMSC466.

Floating point computations, direct methods for linear systems, interpolation, solution of nonlinear equations.

0101	Pierre-Emmanuel Jabin	Seats (Total: 25)
	TuTh 9:30am - 10:45am	BPS 1234

AMSC498A **Selected Topics in Applied Mathematics**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Topics in applied mathematics of special interest to advanced undergraduate students.

Contact department for information to register for this course.

AMSC661 **Scientific Computing II**

Credits: 3

Grading Method: Regular

Prerequisite: Must have knowledge of C or Fortran. And AMSC460 or CMSC460; or (CMSC466 or AMSC466); or (must have knowledge of basic numerical analysis (linear equations, nonlinear equations, integration, interpolation); and permission of instructor). Also offered as: CMSC661. Credit only granted for: AMSC661 or CMSC661.

Fourier and wavelet transform methods, numerical methods for elliptic partial differential equations, numerical linear algebra for sparse matrices. Finite element methods, numerical methods for tiem dependent partia l differential equations. Techniques for scientific computation with an introduction to the theory and software for each topic. Course is part of a two course sequence (660 and 661), but can be taken independently.

0101	Lise-Marie Imbert-Gerard	Seats (Total: 27)
	TuTh 9:30am - 10:45am	MTH B0423

AMSC664 **Advanced Scientific Computing II**

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: AMSC663. Restriction: Permission of instructor. Also offered as: CMSC664. Credit only granted for: AMSC664 or CMSC664.

In the sequence AMSC 663, AMSC 664 students work on a year-long individual project to develop software for a scientific task in a high performance computing environment. Lectures will be given on code development and validation, parallel algorithms for partial differential equations, nonlinear systems, optimization.

0101	Jacob Bedrossian, Thomas Goldstein	Seats (Total: 18)
	MWF 1:30pm - 2:20pm	MTH B0431

AMSC674 **Partial Differential Equations II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH673 or AMSC673; or permission of instructor. Also offered as: MATH674. Credit only granted for: AMSC674 or MATH674.

Boundary value problems for elliptic partial differential equations via operator-theoretic methods. Hilbert spaces of functions. Duality, weak convergence. Sobolev spaces. Spectral theory of compact operators. Eigenfunction expansions.

Offered Spring only.

0101	Konstantina Trivisa	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	MTH 0403

AMSC689 **Research Interactions in Applied Mathematics and Scientific Computation**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

The students participate in a vertically integrated (undergraduate, graduate and/or postdoctoral, faculty) research group. Format varies, but includes regular meetings, readings and presentations of material. See graduate program's online syllabus or contact the graduate program director for more information.

Contact department for information to register for this course.

AMSC715 **Numerical Methods for Evolution Partial Differential Equations**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of instructor; or one graduate level course in partial differential equations or one graduate level course in numerical analysis or scientific computing. Credit only granted for: AMSC612 or AMSC715. Formerly: AMSC612. Additional information: This course continues AMSC 714, but can be taken independently, and is a complement to the graduate courses MATH 673 and MATH 674 in PDEs, AMSC 666 in numerical analysis, and AMSC 660 and AMSC 661 in scientific computing.

Topics include: Heat and wave equations: maximum principle, energy methods and Sobolev spaces, finite difference and finite element methods, von Neumann analysis, stability and error estimates;Linear first order PDEs: upwinding and monotone schemes, finite difference, finite volume, and discontinuous Galerkin methods; Nonlinear conservation laws: weak solutions and entropy conditions,monotone methods.

0101	Ricardo Nochetto	Seats (Total: 20)
	TuTh 5:00pm - 6:15pm	MTH 0101

AMSC760 **Applied Statistics Practicum**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed one year of graduate study in Applied Statistics. Restriction: Must have project proposal approved by SAC coordinator.

A semester long applied applied statistical project (a minimum 10 hours per week or 120 hours in total), in an internship of collaborative research-laboratory setting working on a substantive applied quantitative project with significant statistical content.

0101	Howard Elman	Seats (Total: 10)
	Contact instructor or department for details.	

AMSC762 **Data Analysis Project**

(Perm req)

Credits: 1 Grading Method: Regular

Restriction: Permission of CMNS-Applied Mathematics department; and permission of instructor.

This course cannot be used to meet any of the Applied Statistics Area's seminar requirements. Offered yearly, required of and limited to MS non-thesis and doctoral students in Applied Statistics Area, for whom the resulting projects serve as a Qualifying Exam component. After 5-6 lectures or presentations on components of successful data analyses and write-ups, 3-4 sessions will discuss previous student project submissions. The culminating project, to be completed in a two week period between semesters, is an analysis and written report of one of three project choices made available each year to represent a spectrum of realistic applied statistical problems.

0101	Howard Elman	Seats (Total: 20)
	Contact instructor or department for details.	

AMSC764 **Advanced Numerical Optimization**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH410; or permission of instructor. Also offered as: CMSC764. Credit only granted for: AMSC607, AMSC764 or CMSC764. Formerly: AMSC607.

Modern numerical methods for solving unconstrained and constrained nonlinear optimization problems in finite dimensions. Design of computational algorithms and the analysis of their properties.

0101	Thomas Goldstein	Seats (Total: 54)
	TuTh 11:00am - 12:15pm	IRB 2207

AMSC799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

AMSC808A **Advanced Topics in Applied Mathematics**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

AMSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

AMSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

AMST American Studies Spring 2019

AMST101 **Introduction American Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO, D General Education: DSHU, DVUP

Credit only granted for: AMST101 or AMST201. Formerly: AMST201.

Introduces students to the interdisciplinary field of American Studies by examining concepts such as culture, identity, cultural practices, and globalization, as well as theories underlying these concepts. Engages key themes, especially constructions of difference and identity, cultures of everyday life, and America and the world.

0101	Mark Lockwood MWF 9:00am - 9:50am	Seats (Total: 25) JMZ 0118
0102	Victor Bramble MWF 10:00am - 10:50am	Seats (Total: 25) TWS 0134
0103	Victor Bramble MWF 11:00am - 11:50am	Seats (Total: 25) TWS 0134
0201	Ashley Hufnagel TuTh 11:00am - 12:15pm	Seats (Total: 25) SQH 1123
0202	Jacqueline Partida MWF 12:00pm - 12:50pm	Seats (Total: 25) SQH 1121

AMST202 **Cultures of Everyday Life in America**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS

Examine the structures and patterns of everyday life in the U.S., utilizing methods such as ethnography, oral history, survey research, and textual, visual, and material cultural analysis.

0101	Ashley Hufnagel TuTh 12:30pm - 1:45pm	Seats (Total: 25) SQH 1111

AMST203 **Popular Culture in America**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU, DVUP

An introduction to American popular culture, its historical development, and its role as a reflection of and influence on our culture and society.

0101	Brienne Adams TuTh 2:00pm - 3:15pm	Seats (Total: 25) TWS 0328
0201	Hazim Abdullah-Smith MWF 11:00am - 11:50am	Seats (Total: 25) SQH 1111

AMST205 **Material Aspects of American Life**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HA	General Education: DSHU, DVUP

Historical survey of American material culture. Ways of describing and interpreting accumulated material evidence (e.g., buildings, town plans) introduced by stressing relationship between artifact and culture.

0101	Shoji Sanders	Seats (Total: 25)
	TuTh 9:30am - 10:45am	JMZ 2207

AMST210 **Introduction to Ethnography**

Credits: 3 Grading Method: Regular

Repeatable to 3 credits.

A qualitative research method course used to study social worlds communities, cultures, institutions, and other social groups from the perspectives of the people who inhabit those social worlds. Ethnographic research involves understanding cultural traditions from an insider's perspective by studying the everyday lives of people steeped in those traditions.

0101	Asim Ali	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	TWS 0328

AMST212 **Diversity in American Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploration of the role of diversity in the shaping of American culture. Special emphasis will be placed on the multicultural origins of American popular and material culture, such as foodways and entertainment, and on the experience of "Americanization."

0101	Christina Sessoms	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ASY 3219

AMST262 **Houses, Schools, and Prisons in American Life**

Credits: 3 Grading Method: Regular

This interdisciplinary course explores the role of property, discipline, and punishment in American life. By exploring the ideological underpinnings in property, discipline, and punishment and their manifestations in houses, schools, and prisons we will explore how these entities reflect American society and its values.

0101	Perla Guerrero MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 10) TWS 1321 EDU 1121	Discussion
0102	Perla Guerrero MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 7) TWS 1321 EDU 1121	Discussion

AMST298C **Introduction to Asian American Studies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB, D | General Education: DSHS, DVUP

Also offered as AAST200. Credit granted for AMST298C or AAST200. The aggregate experience of Asian Pacific Americans, from developments in the countries of origin to their contemporary issues. The histories of Asian Pacific American groups as well as culture, politics, the media, and stereotypes, viewed from an interdisciplinary perspective.

0101	Julie Park TuTh 2:00pm - 3:15pm	Seats (Total: 40) SQH 1101

AMST298Q **Selected Topics in American Studies; U.S. Latina/o Literature and Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Cultural study of a specific theme or issue involving artifacts and documents from both past and contemporary American experience.

Also offered as ENGL235. Credit granted for ENGL235 or AMST298Q.

0101	Kerishma Panigrahi MWF 1:00pm - 1:50pm	Seats (Total: 30) TWS 0205

AMST328G **Perspectives on Identity and Culture; The Art of Black Social Movements: Marcus Garvey to Black Lives Matter**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

Also offered as ENGL368K. Credit granted for AMST328G or ENGL368K.

0101	Julius Fleming	Seats (Total: 25)
	MW 3:30pm - 4:45pm	TWS 0201

AMST328K **Perspectives on Identity and Culture; Gender, Labor, and Racial Identity in Diaspora Communities**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

Also offered as AASP398G. Credit only granted for AASP398G or AMST328K.

0101	Sharon Harley	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	WDS 1130

AMST328M **Perspectives on Identity and Culture; Black Baltimore in the Post Racial U.S.: African American Urban Culture in the Age of Obama**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

Also offered as AASP398Q. Credit only granted for AASP398Q or AMST328M.

0101	Robert Choflet	Seats (Total: 35)
	Th 4:00pm - 6:30pm	WDS 1114

AMST328N **Perspectives on Identity and Culture; Introduction to American Indian Cultures of the U.S.**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

Also offered as ANTH468F and RELS319N. Credit granted for AMST328N, ANTH468F or RELS319N. This course surveys the cultures and the historical and contemporary struggles of indigenous peoples of the United States, with a focus on understanding and contrasting the sacred worldviews of indigenous peoples of the U.S. and beyond with the worldviews of both western science and Christianity. It challenges participants to learn more about these worldviews--and about their own worldviews and identities-- through a life-history-based, ethnographic research approach as well as through course readings and class activities and discussions

0101	L Gordon	Seats (Total: 25)
	M 4:00pm - 6:40pm	PLS 1111

AMST328T **Perspectives on Identity and Culture; Make Some Noise: Black Protest Music Since 1964**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

0101	La Marr Bruce	Seats (Total: 20)
	MWF 11:00am - 11:50am	TWS 0328

AMST328U **Perspectives on Identity and Culture; African American Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

Also offered as AASP398C and ENGL317. Credit granted for AASP398C, AMST328U, or ENGL317.

0101	Julius Fleming	Seats (Total: 27)
	MW 5:00pm - 6:15pm	TWS 0221

AMST328V **Perspectives on Identity and Culture; Growing Up Asian American: The Asian Immigrant Family and the Second Generation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

Also offered as AAST398E. Credit granted for AMST328V or AAST398E.

0101	Jia Li Liu	Seats (Total: 26)
	TuTh 2:00pm - 3:15pm	SQH 1111

AMST328Y **Perspectives on Identity and Culture; The Lion and the Man: Frederick Douglass's Life and Times**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

Also offered as HIST319I. Credit granted for AMST328Y or HIST319I.

0101	Christopher Bonner	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	KEY 1117

AMST340 **Introduction to History, Theories and Methods in American Studies**

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed AMST201; and 2 courses in AMST. Restriction: Must be in American Studies program; and sophomore standing or higher.

Introduction to the process of interdisciplinary research, including research literatures, questions, first-hand sources and library and analytic methods in American Studies. Each student will craft a prospectus for original research.

0101	La Marr Bruce	Seats (Total: 25)
	MW 2:00pm - 3:15pm	TWS 0134

AMST386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Permission of ARHU-American Studies department; and junior standing or higher.

1501	Asim Ali	Seats (Total: 5)
	Contact instructor or department for details.	

AMST388 **Honors Thesis**

(Perm req)

Credits: 3 Grading Method: Regular

Individual research, thesis and oral defense. The research project will be conducted under the supervision of a faculty member.

Contact department for information to register for this course.

AMST398 **Independent Studies**

(Perm req)

Credits: 1-3 Grading Method: Regular

Provides the student with the opportunity to pursue independent, interdisciplinary research and reading in specific areas of American culture studies.

Contact department for information to register for this course.

AMST398Z **Independent Studies; Maryland Social Entrepreneur Corps I**

(Perm req)

Credits: 2 Grading Method: Regular

Provides the student with the opportunity to pursue independent, interdisciplinary research and reading in specific areas of American culture studies.

Also offered as BMGT398E. Credit granted for BMGT398E or AMST398Z. Restricted to students participating in the Maryland Social Entrepreneur Corps program. Participating students will be automatically enrolled in the course by Education Abroad. For more information about the program, please contact Jennifer Precht in Education Abroad (jprecht@umd.edu).

Contact department for information to register for this course.

AMST418F **Cultural Themes in America; Asian American Oral History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examination of structure and development of American culture through themes such as "growing up American," "culture and mental disorders," "race," "ethnicity," "regionalism," "landscape," and "humor."

Also offered as AAST498F. Credit granted for AMST418F or AAST498F.

0101	Terry Park	Seats (Total: 20)
	W 5:00pm - 7:30pm	SQH 1123

AMST418H **Cultural Themes in America; Cultural Themes in America-Honors**

(Perm req)

Credits: 3 Grading Method: Regular

Examination of structure and development of American culture through themes such as "growing up American," "culture and mental disorders," "race," "ethnicity," "regionalism," "landscape," and "humor."

Prerequisite: At least three credit hours of prior coursework in AMST.

Contact department for information to register for this course.

AMST418K **Cultural Themes in America; Film and American Landscape**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Examination of structure and development of American culture through themes such as "growing up American," "culture and mental disorders," "race," "ethnicity," "regionalism," "landscape," and "humor."

0101	Susan Pramschufer TuTh 9:30am - 10:45am	Seats (Total: 20) HBK 0302H

AMST418N **Cultural Themes in America; Asian American Public Policy**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVCC

Examination of structure and development of American culture through themes such as "growing up American," "culture and mental disorders," "race," "ethnicity," "regionalism," "landscape," and "humor."

Also offered as AAST498M. Credit granted for AAST498M or AMST418N.

0101	Philip Nash M 5:00pm - 7:30pm	Seats (Total: 20) JMZ 1226

AMST428P **American Cultural Eras; Power, Paranoia, and Politics in Postwar Film and Popular Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Investigation of a decade, period, or generation as a case study in significant social change within an American context. Case studies include "Antebellum America, 1840-1860" and "American culture in the Great Depression."

0101	Robert Chester TuTh 12:30pm - 1:45pm	Seats (Total: 24) SQH 1123

AMST429D **Perspectives on Popular Culture; Black Masculinities in Art, Music, and Dance**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Topics in popular culture studies, including the examination of particular genres, themes, and issues.

Also offered as AASP498K. Credit only granted for AASP498K or AMST429D.

0101	Jason Nichols Tu 4:00pm - 6:30pm	Seats (Total: 35) SQH 1107

AMST450 **Seminar in American Studies**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

Prerequisite: AMST201 and AMST340; and 1 course in AMST. Restriction: Senior standing; and must be in American Studies program.

Developments in theories and methods of American Studies scholarship, with emphasis upon interaction between the humanities and the social sciences in the process of cultural analysis and evaluation.

0101	Mary Sies TuTh 12:30pm - 1:45pm	Seats (Total: 15) TWS 0330
0201	Mary Sies MW 11:00am - 12:15pm	Seats (Total: 15) TWS 0330

AMST498J **Special Topics in American Studies; Asian American Politics**

Credits: 3 Grading Method: Regular General Education: DSHS, DVUP

Topics of special interest.

Also offered as AAST443. Credit granted for AMST498J or AAST443.

0101	Janelle Wong MW 11:00am - 12:15pm	Seats (Total: 40) TWS 1107

AMST498P **Special Topics in American Studies; Race and Nation in Cinema**

Credits: 3 Grading Method: Regular

Topics of special interest.

Also offered as USLT498C. Credit only granted for USLT498C or AMST498P.

0101	Robert Chester TuTh 2:00pm - 3:15pm	Seats (Total: 35) WDS 1114

AMST603 **Current Approaches to American Studies**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in one of the following programs (American Studies (Master's); American Studies (Doctoral)) . Or permission of ARHU-American Studies department; and permission of instructor.

Builds on AMST601 and explores contemporary literature, theory, and intellectual issues in American Studies.

0101	Perla Guerrero W 4:00pm - 6:40pm	Seats (Total: 15) TWS 0134

AMST628D **Seminar in American Studies; Feminist Cultural Criticism of Diasporic Texts**

Credits: 3 Grading Method: Regular, Audit

0101	Psyche Williams-Forson M 4:00pm - 6:40pm	Seats (Total: 15) TWS 0134

AMST628J **Seminar in American Studies; Staging Black Queer Lives**

Credits: 3 Grading Method: Regular, Audit

Also offered as THET608Q. Credit only granted for THET608Q or AMST628J.

0101	Tabitha Chester Tu 2:00pm - 4:30pm	Seats (Total: 10) PAC 1809

AMST629K **Seminar in American Studies; Gentrification and the Politics of Displacement**

Credits: 3 Grading Method: Regular, Audit

0101	Nancy Mirabal Tu 4:00pm - 6:40pm	Seats (Total: 15) TWS 0134

AMST629U **Seminar in American Studies; Introduction to Digital Studies in the Arts and Humanities**

Credits: 3 Grading Method: Regular, Audit

Also offered as MITH610. Credit granted for AMST629U or MITH610. Digital Studies is an interdisciplinary approach to scholarship and teaching that combines the critical study of new forms of digital media, culture, and identity with creative practices and the application of computational tools to areas of humanistic study. While it is often hands-on or applied, Digital Studies also demands approaches that are primarily critical, theoretical, speculative, or experimental- imaginative-in nature. Broadly speaking then, Digital Studies is a response to the widespread influence of digital media across nearly every aspect of contemporary life; more specifically, it recognizes that teaching, research, and scholarship in the arts and humanities cannot and will not remain isolated from the networks, platforms, and media providers all around us. This course is designed to introduce you to several different (and divergent) topics and practices in this diverse, complex, and rapidly changing area.

0101	Jason Farman	Seats (Total: 15)
	Th 4:00pm - 6:40pm	TWS 0134

AMST698 **Directed Readings in American Studies**

(Perm req)

Credits: 3 Grading Method: Regular

This course is designed to provide students with the opportunity to pursue independent, interdisciplinary research and reading in specific aspects of American culture under the supervision of a faculty member.

Contact department for information to register for this course.

AMST798 **Non-Thesis Research**

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

AMST799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

AMST856 **Museum Research Seminar**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: AMST655, ANTH655, or HIST610. Also offered as: ANTH856, HIST810. Credit only granted for: AMST856, ANTH856, or HIST810.

A research seminar focusing on the practice and presentation of cultura and historical scholarship in museums and historical sites. Students will complete an original research project on the challenges and opportunities of public exhibition and interpretation of cultural and historical research.

0101	Mary Alexander M 1:00pm - 3:45pm	Seats (Total: 15) WDS 1130

AMST857 **Museum Scholarship Practicum**

(Perm req)

Credits: 3-6 Grading Method: Regular

Prerequisite: AMST856, ANTH856, or HIST810. Restriction: Permission of Museum Scholarship Program required. Also offered as: ANTH857, HIST811. Credit only granted for: AMST857, ANTH857, or HIST811.

Students devise and carry out a research program using the collections at the Smithsonian Institution or some other cooperating museum, working under joint supervision of a museum professional and a university faculty member.

0401	Mary Sies Contact instructor or department for details.	Seats (Total: 2)
1005	Judith Freidenberg Contact instructor or department for details.	Seats (Total: 5)

AMST878A **American Studies Pedagogy Mentoring; Mentoring for First Year Teaching in American Studies**

Credits: 1-3 Grading Method: Sat-Fail, Audit

This course provides graduate teaching assistants with a structured approach to pedagogical content, techniques, and collaborative practices that they learn and then can use throughout their careers. It also commits a core faculty member to teaching pedagogy and makes it possible for the course to become a formal part of one's load.

0101	Christina Hanhardt Contact instructor or department for details.	Seats (Total: 5)

AMST878B **American Studies Pedagogy Mentoring; Mentoring for Second Year Teaching in American Studies**

Credits: 1-3 Grading Method: Sat-Fail, Audit

This course provides graduate teaching assistants with a structured approach to pedagogical content, techniques, and collaborative practices that they learn and then can use throughout their careers. It also commits a core faculty member to teaching pedagogy and makes it possible for the course to become a formal part of one's load.

0101	Christina Hanhardt	Seats (Total: 5)
	Contact instructor or department for details.	

AMST878C **American Studies Pedagogy Mentoring; Mentoring for Third Year Teaching in American Studies**

Credits: 1-3 Grading Method: Sat-Fail, Audit

This course provides graduate teaching assistants with a structured approach to pedagogical content, techniques, and collaborative practices that they learn and then can use throughout their careers. It also commits a core faculty member to teaching pedagogy and makes it possible for the course to become a formal part of one's load.

0101	Christina Hanhardt	Seats (Total: 5)
	Contact instructor or department for details.	

AMST898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

AMST899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ANSC Animal Science Spring 2019

The following courses may involve the use of animals. Students who are concerned about the use of animals in teaching have the responsibility to contact the instructor, prior to course enrollment, to determine whether animals are to be used in the course, whether class exercises involving animals are optional or required and what alternatives, if any, are available.

ANSC101 **Principles of Animal Science**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A comprehensive overview of the application of biology in the care and use of animals that live in close association with humans including food animals, companion animals, lab animals, zoo animals, etc. The role of science in modern food production using animals will be emphasized.

0101	Sarah Balcom	Seats (Total: 80)
	MWF 12:00pm - 12:50pm	ANS 0408

ANSC103 **Principles of Animal Science Laboratory**

Credits: 1 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in ANSC101. Restriction: Must be in one of the following programs (Environmental Sci & Pol-Environment & Agriculture; Agricultural and Veterinary Medicine; Agricultural Science and Technology) ; or must be in a major within the AGNR-Animal & Avian Sciences department; or permission of department required for students in other College of AGNR programs.

Laboratory focusing on the application of biology in the care and use o animals that live in close association with humans including food animals, companion animals, lab animals, zoo animals, etc. Labs will include live animals. Offered in fall semester only.

Students must pay a $50.00 laboratory materials fee.

0101	Megan McLean M 10:00am - 11:50am	Seats (Total: 20) ANS 0108

ANSC115 **Careers in the Animal Sciences**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANSC101 and ANSC103.

Discussion of current employment opportunities in Animal Science, primarily by invited speakers. In addition, students will have the opportunity to prepare resumes and improve oral presentation skills while working with their peers.

0101	Robert Peters M 3:00pm - 3:50pm	Seats (Total: 30) ANS 0408

ANSC212 **Applied Animal Physiology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANSC211; or (ANSC204 and ANSC205); or students who have taken courses with comparable content may contact the department.

The physiology of domesticated animals with emphasis on functions related to homeostasis, and the physiological adaptation to environmental influences.

0101	Monica VanKlompenberg MWF 1:00pm - 1:50pm	Seats (Total: 88) ESJ 1202

ANSC214 **Applied Animal Physiology Laboratory**

Credits: 1 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in ANSC212.

Application of physiological laboratory techniques to domestic and lab animals.

Students must pay a $50.00 lab materials fee.

0101	Monica VanKlompenberg M 2:00pm - 5:00pm	Seats (Total: 22) ANS 0108	Lab
0102	Monica VanKlompenberg W 2:00pm - 5:00pm	Seats (Total: 22) ANS 0108	Lab
0104	Monica VanKlompenberg Tu 9:00am - 11:50am	Seats (Total: 22) ANS 0108	Lab

ANSC227 **Eating with Eyes Wide Open**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNS, SCIS

Students will investigate the tension that is created by trade-offs that, knowingly or not, are made by consumers relative to agricultural production methods and dietary choices. Course will inform students about their food supply so they can make informed decisions and practice intentional or informed eating.

0101	R Apter MW 9:00am - 9:50am M 11:00am - 12:50pm	Seats (Total: 20) ANS 0408 ANS 1144	Lab
0102	R Apter MW 9:00am - 9:50am W 11:00am - 12:50pm	Seats (Total: 20) ANS 0408 ANS 1144	Lab
0103	R Apter MW 9:00am - 9:50am F 9:00am - 10:50am	Seats (Total: 20) ANS 0408 ANS 1144	Lab

ANSC232 **Horse Management**

Credits: 3 Grading Method: Regular

Prerequisite: ANSC101 and ANSC103. Credit only granted for: ANSC232 or ANSC332. Formerly: ANSC332.

An introductory course on the care, management, and use of horses. Major topics include the industry, breeds, conformation, feeding, health, reproduction, facilities and business.

Students must pay a $50.00 lab materials fee.

0101	Amy Burk MW 11:00am - 11:50am F 9:00am - 10:50am	Seats (Total: 21) ANS 0408 ANS 0412	 Lab
0102	Amy Burk MW 11:00am - 11:50am F 2:00pm - 3:50pm	Seats (Total: 21) ANS 0408 ANS 1144	 Lab

ANSC235 Applied Small Ruminant Parturition

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in ANSC101 and ANSC103. Restriction: Must be in one of the following programs (Animal Sciences: Animal Care & Management; Animal Sciences: Equine Studies; Animal Sciences: Laboratory Animal Care; Animal Sciences: Sciences/Preprofessional; Animal Sciences: Animal Biotechnology; Agricultural and Veterinary Medicine).

Popularly known as "Lamb Watch", the course provides an immersion environment for learning and understanding pre- and post-natal care of ewes and lambs through direct, hands-on involvement in the birthing process and care of the neonate through weaning. Covered topics include zoonoses, basic reproductive physiology of the sheep, normal and abnormal delivery, management of lambs, qualitative assessment, breeding principles, etc.

Students must pay a $50.00 lab materials fee.

0101	Sarah Balcom W 3:00pm - 3:50pm M 2:00pm - 3:30pm	Seats (Total: 15) ANS 0408 Location: TBA	 Lab
0102	Sarah Balcom W 3:00pm - 3:50pm Th 2:00pm - 3:30pm	Seats (Total: 15) ANS 0408 Location: TBA	 Lab

ANSC237 Equine Reproductive Management

Credits: 3 Grading Method: Regular

Prerequisite: ANSC232. Credit only granted for: ANSC237 or INAG233. Additional information: Course participation will include nightly checks of mares in the two weeks prior to parturition, and out-of-class time imprinting and working with newborn foals.

Students learn the fundamental skills necessary to manage an equine breeding herd including anatomy/physiology of genital tracts, estrus detection, manipulation of the estrous cycle, semen collection, pre- and post-foaling techniques, infertility, and health and nutrition of the mare, foal and stallion. Students will be required to spend ~ 30 hours during the spring semester caring for broodmares and foals and attending at least one foaling and estrous detection checks on broodmares outside of regularly scheduled class time.

Students must pay a $50.00 lab materials fee.

0101	Amy Burk	Seats (Total: 16)
	MWF 12:00pm - 12:50pm	ANS 0412

ANSC250 **Companion Animal Care and Management**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Credit only granted for: ANSC250 and ANSC305. Formerly: ANSC305.

Care and management of the companion small animals. Species covered include the cat, dog, rodents, lagomorphs, reptiles, amphibians, birds and others as class interest and schedule dictate. Basic description, evolutionary development, breeding, nutritional and environmental requirements, and public health aspects will be presented for each species.

0101	Sarah Balcom	Seats (Total: 60)
	MWF 10:00am - 10:50am	ANS 0408

ANSC260 **Laboratory Animal Management**

Credits: 3 Grading Method: Regular

Prerequisite: ANSC101 and ANSC103. Credit only granted for: ANSC260 or ANSC413. Formerly: ANSC413.

A comprehensive course in care and management of laboratory animals. Topics covered include regulations governing the use of animals in research, laboratory animal facility design and management, animal research models, animal health management and husbandry, responsibilities of lab animal workers and career opportunities in the field. Hands-on labs focus on lab animal handling, husbandry and common techniques. Field trips are required, and you must attend a minimum number of field trips which will be held during lab time.

Students must pay a $50.00 lab materials fee.

0101	Angela Black MW 10:00am - 10:50am F 8:00am - 12:00pm	Seats (Total: 20) ANS 0412 Location: TBA	 Lab

ANSC282 **Grazing Animal Management**

Credits: 3 Grading Method: Regular

Prerequisite: ANSC101 and ANSC103; or permission of instructor. Credit only granted for: ANSC110, ANSC282, or INAG116. Formerly: ANSC110.

For students interested in acquiring knowledge and skills in pasture management, grazing management of livestock (large and small ruminants, horses), and hay production. Fundamental information regarding best management practices for soils, plants, and grazing livestock will be covered

0101	R Apter TuTh 11:00am - 12:15pm	Seats (Total: 25) ANS 1144	

ANSC315 **Applied Animal Nutrition**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANSC314.

Elements of nutrition, source characteristics and adaptability of various feedstuffs to several classes of livestock. A study of the composition of feeds, nutrient requirements and computerized formulation of economic diets and rations for livestock.

Students must pay a $50.00 lab materials fee.

0101	Richard Kohn TuTh 12:30pm - 1:45pm Th 8:00am - 8:50am	Seats (Total: 23) ANS 0408 ANS 1144	 Discussion
0102	Richard Kohn TuTh 12:30pm - 1:45pm Th 9:00am - 9:50am	Seats (Total: 23) ANS 0408 ANS 1144	 Discussion
0103	Richard Kohn TuTh 12:30pm - 1:45pm W 9:00am - 9:50am	Seats (Total: 23) ANS 0408 ANS 1144	 Discussion

ANSC327 **Molecular and Quantitative Animal Genetics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANSC101, CHEM131, and ANSC103. And BSCI105; or (BSCI170 and BSCI171).

Classical, molecular, and population genetics with specific emphasis on animal systems will be covered. Also, disseminate information on molecular approaches for manipulating genetics at the whole animal level (transgenic and cloning). Other model organisms will be discussed to provide a conceptual framework.

0101	Li Ma, Elisabeth Heuston TuTh 11:00am - 12:15pm	Seats (Total: 80) ANS 0408

ANSC359 **Internship Experience in Animal and Avian Sciences**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail General Education: DSSP

Experiential learning is a key component in an animal science education. Through the internship program, you will have the opportunity to develop your expertise in a specific species and discipline within the animal science curriculum. You will arrange an on- or off-campus internship experience related to animal science. You will spend a specified number of hours at the internship site each week and attend biweekly classroom sessions where we will discuss how the study of animal science fits into your specific internship experience as well as understand how to achieve each of the course learning outcomes.

Prerequisite: ANSC220, ANSC232, ANSC242, ANSC250, ANSC255, ANSC260, or ANSC262. Restriction: Must be in a major within the AGNR-Animal & Avian Sciences department; and permission of instructor.

0101	Monica VanKlompenberg Tu 3:30pm - 5:30pm	Seats (Total: 20) ANS 0402

ANSC379 **Animal Science Undergraduate Teaching Assistant Seminar**

(Perm req)

Credits: 2 Grading Method: Regular

Seminar course for undergraduate teaching assistants within ANSC.

0101	Sarah Balcom W 1:00pm - 1:50pm Contact instructor or department for details.	Seats (Total: 10) ANS 0467

ANSC388 **Honors Thesis Research**

(Perm req)

Credits: 3-6 Grading Method: Regular

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

0701	Chad Stahl Contact instructor or department for details.	Seats (Total: 5)
1901	William Stricklin Contact instructor or department for details.	Seats (Total: 5)
2501	Richard Kohn Contact instructor or department for details.	Seats (Total: 5)
4501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
5201	Amy Burk Contact instructor or department for details.	Seats (Total: 5)

ANSC389 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Contact department for information to register for this course.

ANSC399 **Special Problems in Animal Science**

(Perm req)

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Work assignments are designed to be proportional to the amount of credit. Students are expected to develop an abstract, fact sheet, manuscript, oral presentation, poster, webpage, journal-log, or other scholarly product associated with their study and/or project.

Contact department for information to register for this course.

ANSC435 **Experimental Embryology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: ANSC212. Recommended: Completion of one course in reproductive physiology is recommended. Credit only granted for: ANSC435 or ANSC489M. Formerly: ANSC489M.

Experimental approaches to mammalian embryology with emphasis on domestic livestock systems as applied to research and production systems. Lab will include hands-on experiments and demos of in vitro embryo production, embryo splitting, cell injection and nuclear transfer.

Students must pay a $50.00 lab materials fee.

0101	Carol Keefer	Seats (Total: 20)	
	Tu 2:00pm - 3:15pm	ANS 0108	
	Th 2:00pm - 5:00pm	ANS 0108	Lab

ANSC440 **Zoonotic Diseases and Control**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Prerequisite: BSCI223, ANSC212, ANSC327, BSCI222, BSCI421, or NFSC430; or students who have taken courses with comparable content may contact the department. Credit only granted for: ANSC440 or ANSC489R. Formerly: ANSC489R.

Global perspective of foodborne diseases common to animals and man, specifically those caused by farm animal-originated human pathogens (zoonoses) and their control. A selection of important zoonoses and food safety issues will be specifically covered with an emphasis on the principles of zoonotic disease transmission and control, risk factors to humans, and surveillance methods.

0101	Debabrata Biswas	Seats (Total: 24)
	TuTh 9:30am - 10:45am	ANS 0412

ANSC452 **Avian Physiology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANSC212. Restriction: Junior standing or higher.

The digestive, excretory, respiratory, circulatory, immune, skeletal muscle, endocrine and nervous systems of avian species will be examined.

0101	Tom Porter	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	ANS 0402

ANSC453 **Animal Welfare and Bioethics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANSC101 and ANSC103; or BSCI106; or (BSCI160 and BSCI161); or permission of instructor. Restriction: Junior standing or higher.

Ethical concerns related to the use of animals in modern society. Historical and philosophical overview of animal welfare and bioethics. Applied ethical discussions on human/animal interrelationships, physical and genetic manipulation, and other current issues associated with the treatment of animals used in food production, research, zoos, and as pets.

0101	R Apter	Seats (Total: 40)
	TuTh 4:00pm - 5:15pm	ANS 0412

ANSC489 **Current Topics in Animal Science**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Examination of current developments in the animal sciences.

Contact department for information to register for this course.

ANSC489A **Current Topics in Animal Science; Animal Health Policy and Communication**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examination of current developments in the animal sciences.

Recommended: ANSC225 and ANSC340. Restriction: Must be in a major within the AGNR-Animal & Avian Sciences department; or permission of AGNR-VA-MD Regional Col Veterinary Med. An introduction to animal health policy with emphasis on understanding how science and politics interact and influence animal health policy and how veterinarians and animal scientists can effectively communicate science to non-scientists such as legislators and policymakers.

0101	Nathaniel Tablante	Seats (Total: 10)
	TuTh 9:30am - 10:45am	ANS 0402

ANSC489O **Current Topics in Animal Science; Nutritional Aspects of Metabolic Disease**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examination of current developments in the animal sciences.

Prerequisite: ANSC101, CHEM131, and BSCI105 or equivalent. Biochemical and physiological fundamentals of nutrition. Discussion of protein, fat, carbohydrate, energy, minerals, and vitamins and their roles and interrelationships in nutrition, metabolism, and diseases in humans and animals. The course will use recommended texts for foundation.

0101	Byung-Eun Kim	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	ANS 0402

ANSC627 **Molecular and Quantitative Genetics**

Credits: 3 Grading Method: Regular, Audit

Classical, molecular, and population genetics with specific emphasis on animal systems will be covered. Also, disseminate information on molecular approaches for manipulating genetics at the whole animal level (transgenic and cloning). Other model organisms will be discussed to provide a conceptual framework.

0101	Li Ma, Elisabeth Heuston	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	ANS 0408

ANSC660 **Poultry Literature**

Credits: 1-4 Grading Method: Regular, Audit

Readings on individual topics are assigned. Written reports required. Methods of analysis and presentation of scientific material are discussed.

Contact department for information to register for this course.

ANSC688J **Special Topics; Zoonotic Diseases and Control**

Credits: 3 Grading Method: Regular, Audit

Lectures, experimental courses, and other special subjects in the fields of animal sciences and veterinary medicine.

Prerequisites: BSCI223; recommended NFSC430; or permission of instructor. Lectures will take a global perspective of foodborne diseases common to animals and man, specifically those caused by farm animal-originated human pathogens (zoonoses) and their control. A selection of important zoonoses and food safety issues will be specifically covered with an emphasis on the principles of zoonotic disease transmission and control, risk factors to humans, and surveillance mehtods.

0101	Debabrata Biswas	Seats (Total: 6)
	TuTh 9:30am - 10:45am	ANS 0412

ANSC688O **Special Topics; Nutritional Aspects of Metabolic Disease**

Credits: 3 Grading Method: Regular, Audit

Lectures, experimental courses, and other special subjects in the fields of animal sciences and veterinary medicine.

Prequisite: ANSC101, CHEM131, and BSCI105 or equivalent. Biochemical and physiological fundamentals of nutrition. Discussion of protein, fat, carbohydrate, energy, minerals, and vitamins and their roles and interrelationships in nutrition, metabolism, and diseases in humans and animals. The course will use recommended texts for foundation.

0101	Byung-Eun Kim	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	ANS 0402

ANSC688W **Special Topics; Advanced Animal Welfare**

Credits: 1-4 Grading Method: Regular, Audit

Lectures, experimental courses, and other special subjects in the fields of animal sciences and veterinary medicine.

0101	R Apter	Seats (Total: 5)
	TuTh 4:00pm - 5:15pm	ANS 0412

ANSC698C **Seminar; Recent Advances in Animal and Avian Sciences**

Credits: 1 Grading Method: Regular, Audit

Students are required to prepare papers based upon current scientific publications relating to animal science, or upon their research work, for presentation before and discussion by the class; (1) recent advances; (2) nutrition; (3) physiology; (4) biochemistry.

0101	Richard Kohn	Seats (Total: 30)
	Tu 3:30pm - 5:30pm	ANS 0408

ANSC699 **Special Problems in Animal Science**

(Perm req)

Credits: 1-2 Grading Method: Regular, Audit

Work assigned in proportion to amount of credit. Prerequisite: approval of staff. Problems will be assigned which relate specifically to the character of work the student is pursuing.

Contact department for information to register for this course.

ANSC799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ANSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ANSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ANTH Anthropology Spring 2019

ANTH222 **Introduction to Ecological and Evolutionary Anthropology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: LL General Education: DSNL, DVUP

Credit only granted for: ANTH220 or ANTH222.

An introduction to the evolution of human physiology and human behavior, the relationship between hominid and non-hominid primates, and the study of relationships between a population of humans and their biophysical environment.

Students must pay a $40.00 lab materials fee.

0101	Barnet Pavao-Zuckerman TuTh 9:30am - 10:45am M 8:00am - 10:00am	Seats (Total: 20) ATL 2324 WDS 0124C	 Lab
0102	Barnet Pavao-Zuckerman TuTh 9:30am - 10:45am M 11:00am - 1:00pm	Seats (Total: 20) ATL 2324 WDS 0124C	 Lab
0103	Barnet Pavao-Zuckerman TuTh 9:30am - 10:45am M 2:00pm - 4:00pm	Seats (Total: 20) ATL 2324 WDS 0124C	 Lab
0104	Barnet Pavao-Zuckerman TuTh 9:30am - 10:45am W 8:00am - 10:00am	Seats (Total: 20) ATL 2324 WDS 0124C	 Lab
0105	Barnet Pavao-Zuckerman TuTh 9:30am - 10:45am W 11:00am - 1:00pm	Seats (Total: 20) ATL 2324 WDS 0124C	 Lab

0106	Barnet Pavao-Zuckerman TuTh 9:30am - 10:45am W 2:00pm - 4:00pm	Seats (Total: 20) ATL 2324 WDS 0124C	 Lab

ANTH240 **Introduction to Archaeology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB, D | General Education: DSHS, DVUP

Exploration of the variety of past human societies and cultures through archaeology, from the emergence of anatomically modern humans to the more recent historical past.

0101	Mark Leone MWF 12:00pm - 12:50pm	Seats (Total: 35) WDS 1114	
0201	Stephen Brighton TuTh 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) TYD 2106 KEY 0125	 Discussion
0202	Stephen Brighton TuTh 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 25) TYD 2106 KEY 0125	 Discussion
0203	Stephen Brighton TuTh 2:00pm - 2:50pm F 3:00pm - 3:50pm	Seats (Total: 25) TYD 2106 KEY 0125	 Discussion

ANTH242 **Fire, Farming and Climate Change: An Archaeology Take on the History of Human Impacts on our Planet**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

An examination of why climate changes, the methods for recording climate change, and case studies of the varied responses of past human societies to climate change in different geographic regions and time periods with varying socio-political and economic systems.

0101	George Hambrecht TuTh 11:00am - 12:15pm	Seats (Total: 78) ESJ 0215

ANTH260 **Introduction to Sociocultural Anthropology and Linguistics**

Credits: 3 | Grading Method: Regular, Audit | CORE: SB, D | General Education: DSHS, DVUP

Culture and social relationships in a wide variety of settings from small-scale to complex societies. An overview of how anthropology analyzes human behavior. Particular attention to the relationship between language and culture.

0101	Christina Getrich TuTh 9:30am - 10:20am F 9:00am - 9:50am	Seats (Total: 19) JMZ 0220 WDS 1127	Discussion
0102	Christina Getrich TuTh 9:30am - 10:20am F 10:00am - 10:50am	Seats (Total: 19) JMZ 0220 WDS 1127	Discussion
0103	Christina Getrich TuTh 9:30am - 10:20am F 11:00am - 11:50am	Seats (Total: 19) JMZ 0220 WDS 1127	Discussion
0104	Christina Getrich TuTh 9:30am - 10:20am F 12:00pm - 12:50pm	Seats (Total: 19) JMZ 0220 WDS 1127	Discussion
0105	Christina Getrich TuTh 9:30am - 10:20am F 1:00pm - 1:50pm	Seats (Total: 19) JMZ 0220 WDS 1127	Discussion
0106	Christina Getrich TuTh 9:30am - 10:20am F 2:00pm - 2:50pm	Seats (Total: 19) JMZ 0220 WDS 1127	Discussion

ANTH266 **Changing Climate, Changing Cultures**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS, DVCC, SCIS

Explore past, present, and future interactions between humans and climate. Discussions, methods-oriented activities, and case study analyses provide students a foundation for appreciating the role of anthropology in understanding, responding to, and preparing for climate change.

0101	L Jen Shaffer TuTh 11:00am - 12:15pm	Seats (Total: 60) HJP 2242	

ANTH310 **Method & Theory in Medical Anthropology and Global Health**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP, DVUP

Prerequisite: ANTH210. Also offered as: ANTH665. Credit only granted for: ANTH310, ANTH465, or ANTH665. Formerly: ANTH465.

Provides a critical perspective to global health that encompasses key political, economic, and cultural factors associated with the nature and magnitude of global health issues such as HIV/AIDS, tuberculosis and malaria, paying particular attention to how poverty and inequalities within and between societies has accelerated current global health challenges. Introduces students to how medical anthropologists have contributed to the debates surrounding the globalization of health.

0101	Clara Richards	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	WDS 1114

ANTH340 Method and Theory in Archaeology

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANTH240. Restriction: Must be in Anthropology program; or permission of BSOS-Anthropology department.

Theory, method, and practice which guides modern anthropological archaeology. Includes research design and execution (from survey through excavation and interpretation), the reconstruction of aspects of past cultures, and the understanding of cultural change and meaning.

0101	Stephen Brighton	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	WDS 0104

ANTH341 Introduction to Zooarchaeology

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Credit only granted for: ANTH298D, ANTH641 or ANTH341. Formerly: ANTH298D.

Zooarchaeology is the study of animal remains, especially bones, from archaeological contexts. This course will address both methodology as well as many of the main issues in contemporary zooarchaeology. Zooarchaeology stands at the intersection of a number of social and biological sciences, such as Biology, Osteology, Ecology, History, Anthropology and Economics. We will discuss basic animal osteology and the concepts and practices behind the identification of animal remains from archaeological contexts. We will cover the nature of the data in zooarchaeology, especially issues around using proxy data.

0101	George Hambrecht	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	TLF 0104B

ANTH358A **Undergraduate Teaching Assistant; Undergraduate Teaching Assistant in Archaeology**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Individual instruction course: contact department or instructor to obtain section and index numbers.

Contact department for information to register for this course.

ANTH358B **Undergraduate Teaching Assistant; Undergraduate Teaching Assistant in Bio-Anthropology**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Individual instruction course: contact department or instructor to obtain section and index numbers.

Contact department for information to register for this course.

ANTH358C **Undergraduate Teaching Assistant; Undergraduate Teaching Assistant in Cultural Anthropology**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Individual instruction course: contact department or instructor to obtain section and index numbers.

Contact department for information to register for this course.

ANTH386 **Experiential Learning**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail

Recommended: Completion of advanced courses in relevant subfield of anthropology recommended. Restriction: Permission of BSOS-Anthropology department; and junior standing or higher; and must be in Anthropology program.

Contact department for information to register for this course.

ANTH398A **Independent Study; Research Problems**

(Perm req)

Credits: 1-3 Grading Method: Regular

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398B **Independent Study; Modern Tribes of Rome**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398C **Independent Study; The Mediterranean World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398E **Independent Study; Bodies and Burials**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398H **Independent Study; Social Anthropology of Britain**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398I **Independent Study; Great Kingdoms of Ancient Near East**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398L **Independent Study; Social Anthropology of Britain**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH411 **Anthropology of Immigration and Health**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as: ANTH611. Credit only granted for: ANTH411 or ANTH611.

The United Nations estimates that some 230 million people around the world are migrants who live outside their country of birth. This course focuses on these migrant populations, considering the implications of movement across borders and settlement in new societies on their health and well-being. We will investigate the social, political, and economic structures that shape disease and illness and produce differential access to health care for migrants. Within that context, we will explore the health effects of migration itself and particular health conditions from which migrants suffer. We will also examine how migrants interface with differently configured health care systems as well as strategies they and their advocates use to promote health and well-being.

0101	Christina Getrich	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	WDS 0104

ANTH424 **Human Skeletal Anatomy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

In addition to descriptive information about bone identification, the lectures will address the history of human anatomical studies, the development of analytical techniques, and the application of these techniques in paleoanthropology, comparative anatomy, functional anatomy (and related fields, such as physical therapy), and skeletal analysis in museum, historic cemetery, archaeological, and forensic settings. Emphasis will be on the development of the skeleton and recognition of normal variation in bones. The laboratory sessions will allow the students access to human bones for the purpose of identification, documentation of human variation, and application of techniques to obtain information about the living individual from the skeleton.

0101	Marilyn London	Seats (Total: 20)
	Tu 2:00pm - 4:45pm	WDS 0124C

ANTH434 **Digital Heritage Preservation**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ANTH434, ANTH634.

New technologies are revolutionizing the ways in which our global heritage is being recorded, analyzed, and interpreted to the public. This course will introduce students to the benefits and challenges of a variety of methods. They will gain hands on experiences with equipment used to record historic structures and archaeological sites. They will also conduct the post-processing of data with a variety of software packages required for analysis and dissemination.

0101	Mark Leone	Seats (Total: 5)
	TuTh 2:00pm - 3:45pm	ARC 1115

ANTH435 **Archaeological Ethnography and Heritage Ethnography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ANTH435 or ANTH635.

Archaeologists and other heritage experts are increasingly incorporating ethnographic approaches as part of their methodological toolkit. This course explores key methods and frameworks in archaeological ethnography and heritage ethnography, set within the broader contexts of the historical development of anthropological theory and the current rapid growth of heritage studies as an interdisciplinary field of research and practice.

0101	Kathryn Lafrenz Samuels	Seats (Total: 20)
	M 1:00pm - 3:45pm	WDS 1114

ANTH454 **Political Ecology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ANTH454 or ANTH654.

The use of the environment is contested and negotiated within historic and contemporary societies. Incorporating methods and perspectives from across the social sciences through specific case studies in the Americas, Europe, Asia and Africa, this course offers a survey to coupled human-environmental systems.

0101	Yancey Orr	Seats (Total: 20)
	Tu 4:00pm - 6:45pm	TLF 1103

ANTH456 **Conservation and Indigenous People in South America**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ANTH468L, ANTH456, ANTH688L, ANTH656. Formerly: ANTH468L.

Considers indigenous peoples and their relation to the lands on which they live, issues of traditional indigenous knowledge and land management as well as new contributions by indigenous peoples to changing landscapes. Reviews legal mechanisms and instruments through which indigenous peoples have rights to the resources they occupy and utilize. Taking specific cases and examining them through the lens of political and social ecology, tthe role of indigenous peoples in local and worldwide conservation efforts is considered. Case studies will emphasize the indigenous peoples and conservation policies of Latin America.

0101	Janet Chernela	Seats (Total: 25)
	Tu 2:00pm - 4:45pm	JMP 2202

ANTH462 **Amazon Through Film**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ANTH468D or ANTH462. Formerly: ANTH468D.

An interdisciplinary course that utilizes film to consider the Amazon basin, its history, peoples, and landscapes through cinematic representations. The course places the films in the context of film history and critical theory. The course takes into consideration the Brazilian, North American, Mexican, European and Argentine creators of the films and their visions of Amazonia, as well as the audiences and markets to which the films are intended.

0101	Janet Chernela	Seats (Total: 30)
	Tu 6:00pm - 8:45pm	WDS 0104

ANTH467 **Researching Environment and Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Recommended: ANTH322, ANTH360, ENSP101, or ENSP102.

In this applied course, students use mixed methods to research a locally-based, environmental sustainability issue. Classroom time will be split between seminar discussions of theory, methods, and relevant case studies, and lab work focused on project development, data analysis, and report write up. Students are expected to spend additional time outside class on data collection, analysis, and writing

0101	L Jen Shaffer	Seats (Total: 20)
	Th 2:00pm - 4:45pm	WDS 0124C

ANTH468F **Special Topics in Cultural Anthropology; Introduction to American Indian Cultures of the U.S.**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced courses in varying specialty areas of cultural anthropology that respond to new theoretical developments, faculty research interests, or specialties of visiting scholars.

Also offered as AMST328N and RELS319N. Credit granted for AMST328N, ANTH468F or RELS319N. This course surveys the cultures and the historical and contemporary struggles of indigenous peoples of the United States, with a focus on understanding and contrasting the sacred worldviews of indigenous peoples of the U.S. and beyond with the worldviews of both western science and Christianity. It challenges participants to learn more about these worldviews--and about their own worldviews and identities-- through a life-history-based, ethnographic research approach as well as through course readings and class activities and discussions.

0101	L Gordon	Seats (Total: 25)
	M 4:00pm - 6:40pm	PLS 1111

ANTH469J **Advanced Special Topics in Cultural Anthropology; Disaster Recovery in Japan**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Upper level cultural anthropology courses on varying topics derived fro new interests of the faculty or the specialties of visiting scholars.

Contact department for information to register for this course.

ANTH476 **Senior Research**

(Perm req)

Credits: 3-4 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Anthropology program. Credit only granted for: ANTH476 or ANTH486.

Capstone course in which students pursue independent research into a current problem in anthropology, selected with assistance of a committee of faculty. Research leads to the writing of a senior thesis in anthropology.

Contact department for information to register for this course.

ANTH477 **Senior Thesis**

(Perm req)

Credits: 3-4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ANTH476. Restriction: Permission of BSOS-Anthropology department; and must be in Anthropology program. Credit only granted for: ANTH477 or ANTH487.

Capstone course in which students write a senior thesis on independent research into a current problem in anthropology. The thesis is defined before a committee of faculty.

Contact department for information to register for this course.

ANTH485 **Honors Research Preparation**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of BSOS-Anthropology department; and must be in Anthropology program; and must be admitted to University Honors Program or Anthropology Honors Program.

Honors Research Preparation is an independent study course during which the Honors candidate will work with their Honors Thesis Advisor to establish not only the structure of the thesis and timeline, but also the formation of Thesis Review Committee.

Contact department for information to register for this course.

ANTH486 **Honors Research**

(Perm req)

Credits: 3-4 Grading Method: Regular

Restriction: Permission of BSOS-Anthropology department; and must be in Anthropology program; and must be admitted to University Honors Program or Anthropology Honors Program. Credit only granted for: ANTH486 or ANTH476.

Capstone course in which students pursue independent research into a current problem in anthropology, selected with assistance of a committee of faculty. Research leads to the writing of an honors thesis in anthropology.

Contact department for information to register for this course.

ANTH487 **Honors Thesis**

(Perm req)

Credits: 3-4 Grading Method: Regular

Prerequisite: ANTH486. Restriction: Permission of BSOS-Anthropology department; and must be in Anthropology program; and must be admitted to University Honors Program or Anthropology Honors Program. Credit only granted for: ANTH487 or ANTH477.

Capstone course in which students write a thesis on the results of independent research into a current problem in anthropology.

Contact department for information to register for this course.

ANTH611 **Anthropology of Immigration and Health**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ANTH411 or ANTH611.

The United Nations estimates that some 230 million people around the world are migrants who live outside their country of birth. This course focuses on these migrant populations, considering the implications of movement across borders and settlement in new societies on their health and well-being. We will investigate the social, political, and economic structures that shape disease and illness and produce differential access to health care for migrants. Within that context, we will explore the health effects of migration itself and particular health conditions from which migrants suffer. We will also examine how migrants interface with differently configured health care systems as well as strategies they and their advocates use to promote health and well-being.

0101	Christina Getrich	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	WDS 0104

ANTH630 **Quantification and Statistics in Applied Anthropology**

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be in one of the following programs (Anthropology (Doctoral); Anthropology (Master's)).

An intensive overview of key quantitative and statistical approaches used by social scientists in applied ad policy research. This includes nonparametric and parametric statistical approaches. Students utilize statistical software and analyze existing and student-created databases. Anthropological case studies are emphasized.

0101	Daniel Contreras	Seats (Total: 20)
	M 4:00pm - 6:45pm	WDS 1114

ANTH634 **Digital Heritage Preservation**

Credits: 4

Grading Method: Regular, Audit

New technologies are revolutionizing the ways in which our global heritage is being recorded, analyzed, and interpreted to the public. This course will introduce students to the benefits and challenges of a variety of methods. They will gain hands on experiences with equipment used to record historic structures and archaeological sites. They will also conduct the post-processing of data with a variety of software packages required for analysis and dissemination.

Also offered as HISP619B. Credit only granted for ANTH634, HISP619B, or ANTH434.

0101	Stefan Woehlke, Mark Leone	Seats (Total: 10)
	TuTh 2:00pm - 3:45pm	ARC 1115

ANTH635 **Archaeological Ethnography and Heritage Ethnography**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ANTH435 or ANTH635.

Archaeologists and other heritage experts are increasingly incorporating ethnographic approaches as part of their methodological toolkit. This course explores key methods and frameworks in archaeological ethnography and heritage ethnography, set within the broader contexts of the historical development of anthropological theory and the current rapid growth of heritage studies as an interdisciplinary field of research and practice.

0101	Kathryn Lafrenz Samuels	Seats (Total: 10)
	M 1:00pm - 3:45pm	WDS 1114

ANTH641 **Introduction to Zooarchaeology**

Credits: 3 Grading Method: Regular, Audit

Also offered as: ANTH341. Credit only granted for: ANTH298D, ANTH341 or ANTH641.

Zooarchaeology is the study of animal remains, especially bones, from archaeological contexts. This course will address both methodology as well as many of the main issues in contemporary zooarchaeology. Zooarchaeology stands at the intersection of a number of social and biological sciences, such as Biology, Osteology, Ecology, History, Anthropology and Economics. We will discuss basic animal osteology and the concepts and practices behind the identification of animal remains from archaeological contexts. We will cover the nature of the data in zooarchaeology, especially issues around using proxy data.

0101	George Hambrecht TuTh 2:00pm - 3:15pm	Seats (Total: 5) TLF 0104B

ANTH654 **Political Ecology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ANTH454 or ANTH654.

The use of the environment is contested and negotiated within historic and contemporary societies. Incorporating methods and perspectives from across the social sciences through specific case studies in the Americas, Europe, Asia and Africa, this course offers a survey to coupled human-environmental systems.

0101	Yancey Orr Tu 4:00pm - 6:45pm	Seats (Total: 10) TLF 1103

ANTH656 **Conservation and Indigenous People in South America**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ANTH468L, ANTH456, ANTH688L, ANTH656. Formerly: ANTH688L.

Considers indigenous peoples and their relation to the lands on which they live, issues of traditional indigenous knowledge and land management as well as new contributions by indigenous peoples to changing landscapes. Reviews legal mechanisms and instruments through which indigenous peoples have rights to the resources they occupy and utilize. Taking specific cases and examining them through the lens of political and social ecology, tthe role of indigenous peoples in local and worldwide conservation efforts is considered. Case studies will emphasize the indigenous peoples and conservation policies of Latin America.

0101	Janet Chernela	Seats (Total: 5)
	Tu 2:00pm - 4:45pm	JMP 2202

ANTH689A **Special Problems in Anthropology**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ANTH701 **Anthropology Internship Preparation**

Credits: 3 Grading Method: Regular, Audit

Preparation for internship includes practicum training in development, presentation and evaluation of position papers, proposals and work plans; literature search and use of secondary data sources in decision making the effect cultural analysis and resource management; ethics and professional development for work in non-academic settings.

Contact department for information to register for this course.

ANTH712 **Anthropology Internship Analysis**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ANTH789.

The preparation and presentation of internship results, and the development of skills in report writing and presentation. Includes the completion of a professional quality report or publishable paper based on the internship experience.

Contact department for information to register for this course.

ANTH722 **Ecological Anthropology**

Credits: 3 Grading Method: Regular

Restriction: Must be in one of the following programs (Anthropology (Doctoral); Anthropology (Master's)). Credit only granted for: ANTH720 or ANTH722.

An overview of important approaches to ecological anthropology. Population, systems, community, political, behavioral and evolutionary ecology will be examined as they have been applied to a range of anthropological questions. Complexity theory (nonlinear dynamics) and topics in game theory will also be addressed. Students will map the field of ecological anthropology and to assess the strengths and weaknesses of contemporary approaches, methods and theories.

0101	Michael Paolisso	Seats (Total: 20)
	Th 4:00pm - 6:45pm	WDS 1130

ANTH740 **Theories of the Past and Accomplishments of Archaeology**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ANTH689P or ANTH740. Formerly: ANTH689P.

The primary purpose is to highlight some of the key achievements made b archaeologists in informing questions of interest to society from 1850 on. Key achievements include how archaeologists understand elements of the past thought to be central to the development of modern socieity. A secondary purpose is to introduce students to the theories used to understand the place of the past in society and the function of answers to questions thought central to modern social life.

Also offered as ANTH448P.

0101	Mark Leone	Seats (Total: 15)
	Tu 3:30pm - 6:00pm	WDS 1130

ANTH788 **Internship Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

This course augments ANTH 789 and is graded in conjunction with it.

Contact department for information to register for this course.

ANTH789 **Internship**

(Perm req)

Credits: 3-6 Grading Method: Regular, Audit

Individual instruction course supervised by a department faculty member.

Contact department for information to register for this course.

ANTH856 **Museum Research Seminar**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: AMST655, ANTH655, or HIST610. Also offered as: HIST810, AMST856. Credit only granted for: AMST856, ANTH856, or HIST810.

A research seminar focusing on the practice and presentation of cultura and historical scholarship in museums and historical sites. Students will complete an original research project on the challenges and opportunities of public exhibition and interpretation of cultural and historical research.

0101	Mary Alexander M 1:00pm - 3:45pm	Seats (Total: 15) WDS 1130

ANTH857 **Museum Scholarship Practicum**

(Perm req)

Credits: 3-6 Grading Method: Regular

Prerequisite: AMST856, ANTH856, or HIST810. Restriction: Permission of Museum Scholarship Program required. Also offered as: HIST811, AMST857. Credit only granted for: AMST857, ANTH857, or HIST811.

Students devise and carry out a research program using the collections at the Smithsonian Institution or some other cooperating museum, working under joint supervision of a museum professional and a university faculty member.

0101	Mary Alexander Contact instructor or department for details.	Seats (Total: 5)
0401	Instructor: TBA Contact instructor or department for details.	Seats (Total: 2)
1005	Judith Freidenberg Contact instructor or department for details.	Seats (Total: 10)

ANTH898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ANTH899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

AOSC Atmospheric and Oceanic Science Spring 2019

AOSC123 **Causes and Implications of Global Change**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS, SCIS

Also offered as: GEOL123. Credit only granted for: AOSC123, GEOG123, GEOL123, or METO123. Formerly: METO123.

Responsible policy and decision making on issues related to the global environment requires understanding of the basic scientific issues, relationships between the geophysical and biological sciences, the impacts on regional and global endeavors, and the political manner in which humans respond. This course embodies an integrated introduction to the broad scientific and social aspects of the global change problem.

0101	Michael Evans MW 12:00pm - 12:50pm F 9:00am - 9:50am	Seats (Total: 20) ATL 2324 PLS 1164	Discussion
0102	Michael Evans MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 20) ATL 2324 PLS 1164	Discussion
0103	Michael Evans MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 20) ATL 2324 PLS 1164	Discussion
0104	Michael Evans MW 12:00pm - 12:50pm F 9:00am - 9:50am	Seats (Total: 20) ATL 2324 PLS 1172	Discussion
0105	Michael Evans MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 20) ATL 2324 PLS 1172	Discussion
0106	Michael Evans MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 20) ATL 2324 PLS 1172	Discussion

AOSC200 **Weather and Climate**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: PS	General Education: DSNL (if taken with AOSC201), DSNS, SCIS

Prerequisite: MATH107, MATH110, or MATH115. Recommended: Concurrent enrollment in AOSC201. Formerly: METO200.

Broad survey of the state of knowledge and problems of atmospheric science. Origin and structure of the atmosphere, meteorological observations, weather maps, forecasting, satellites, energetics, wind, general circulation, storms, severe weather, climate change, air pollution.

A Marquee Science and Technology Course designed for Non-Science Majors: http://www.marqueecourses.umd.edu/ Click here for more Marquee course information.*

0101	Timothy Canty TuTh 12:30pm - 1:45pm W 1:00pm - 1:50pm	Seats (Total: 30) ATL 2324 ATL 2416	Discussion
0102	Timothy Canty TuTh 12:30pm - 1:45pm W 2:00pm - 2:50pm	Seats (Total: 30) ATL 2324 ATL 2330	Discussion
0103	Timothy Canty TuTh 12:30pm - 1:45pm W 3:00pm - 3:50pm	Seats (Total: 30) ATL 2324 ATL 2416	Discussion
0104	Timothy Canty TuTh 12:30pm - 1:45pm W 1:00pm - 1:50pm	Seats (Total: 30) ATL 2324 ANS 0402	Discussion
0201	Timothy Canty TuTh 2:00pm - 3:15pm W 2:00pm - 2:50pm	Seats (Total: 30) ATL 2324 MTH 0411	Discussion
0202	Timothy Canty TuTh 2:00pm - 3:15pm W 3:00pm - 3:50pm	Seats (Total: 30) ATL 2324 CHM 0127	Discussion
0203	Timothy Canty TuTh 2:00pm - 3:15pm M 1:00pm - 1:50pm	Seats (Total: 30) ATL 2324 ATL 2416	Discussion
0204	Timothy Canty TuTh 2:00pm - 3:15pm M 2:00pm - 2:50pm	Seats (Total: 30) ATL 2324 ATL 2330	Discussion

AOSC201 **Weather and Climate Laboratory**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit | CORE: PL

Corequisite: AOSC200. Formerly: METO201.

Laboratory exercises to supplement AOSC200, including weather observations, weather map analysis, use of the Internet, forecasting practice and climate modeling.

Students must pay a $60.00 lab materials fee.

0101	Hannah Daley M 2:00pm - 3:50pm	Seats (Total: 26) ATL 3426	Lab
0102	Lindsey Rodio W 2:00pm - 3:50pm	Seats (Total: 26) ATL 3426	Lab
0103	Agniv Sengupta F 8:00am - 9:50am	Seats (Total: 26) ATL 3426	Lab
0104	Hannah Daley M 12:00pm - 1:50pm	Seats (Total: 26) ATL 3426	Lab
0105	Agniv Sengupta F 12:00pm - 1:50pm	Seats (Total: 26) ATL 3426	Lab
0106	Justin Hicks F 2:00pm - 3:50pm	Seats (Total: 26) ATL 3426	Lab
0107	Justin Hicks Tu 3:30pm - 5:20pm	Seats (Total: 26) ATL 3426	Lab
0108	Lindsey Rodio W 12:00pm - 1:50pm	Seats (Total: 26) ATL 3426	Lab

AOSC247 **Scientific Programming: Python**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH140. Recommended: Familiarity with basic descriptive statistics. Credit only granted for: AOSC458J, AOSC247 or CMSC131. Formerly: AOSC458J.

A comprehensive introduction to scientific computation and visualization techniques with Python applied to data intensive questions in the Natural Sciences. The class emphasizes real-world applications, providing students with essential hands-on experience using Python for data analysis and visualization, developing analytical skills for observational and modeling data, and performing virtual experiments to distinguish data contributing factors. Students will gain an understanding of the scientific data issues including: signal vs noise, trend vs periodicity, mean vs extreme changes, and accuracy vs uncertainty. Students will gain extensive experience using command line linux. Skills including local and remote file transfer and synchronization, file and directory permission, utilities for diagnosing performance issues, and data compression.

Students must pay a $60.00 lab materials fee.

0101	Jeffrey Henrikson MW 5:00pm - 6:16pm	Seats (Total: 26) ATL 3426

AOSC401 **Climate Dynamics and Earth System Science**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AOSC400 or AOSC200; and MATH141; and (PHYS161 or PHYS171). Or permission of instructor.

Introduction of the earth and global climate systems and their major components: atmosphere, land, ocean, biosphere and cryosphere. Key processes governing the function of the earth's climate: Global energy balance and water cycle, climate dynamics (general circulation of the atmosphere and ocean) and climate physics (aerosol, cloud and rain), as well as climate variability and climate changes. Phenomena resulting from this coupled system including El Nino-Southern Oscillation, monsoons, and the hydrological cycle will be discussed, with a focus on how the Earth System responds to global warming.

0101	Zhanqing Li TuTh 2:00pm - 3:15pm	Seats (Total: 25) ATL 2428

AOSC424 **Remote Sensing of the Atmosphere and Ocean**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (PHYS171, PHYS161, MATH141); or permission of instructor.

Many of the properties of the atmosphere, ocean, and land surface are most easily observed from satellite remote sensing. This course will provide students with a hands-on introduction to a variety of passive and active sensing techniques and sensors observing our changing environment. Topics include: orbital dynamics and electromagnetic properties of the atmosphere and surface; atmospheric emission characteristics and scattering; chemical composition and spectroscopy; temperature retrievals; detection and retrieval of aerosol, cloud and rain; ocean surface properties; sea surface temperature and color; active sensing of wind stress, sea level, and internal waves; time-dependent gravity; properties of vegetation and ice.

0101	Derrick Lampkin MWF 2:00pm - 2:50pm	Seats (Total: 20) ATL 2416

AOSC432 **Dynamics of the Atmosphere and Ocean**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AOSC431. Corequisite: MATH246. Credit only granted for: AOSC432, METO432, or AOSC632. Formerly: METO432.

Equations of motion and their approximation, scale analysis for the atmosphere and the ocean. Conservation properties. Fluid motion in the atmosphere and oceans. Geostrophic/balanced and ageostrphic/unbalanced motion. Circulation, vorticity, and potential vorticity. Introduction to the boundary layer.

0101	Kayo Ide TuTh 9:30am - 10:45am	Seats (Total: 20) ATL 2416
AM01	Kayo Ide TuTh 9:30am - 10:45am	Seats (Total: 1) ATL 2416

AOSC433 **Atmospheric Chemistry and Climate**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131, CHEM135, or CHEM146. And MATH241; or permission of CMNS-Atmospheric & Oceanic Science department. Also offered as: CHEM433. Credit only granted for: AOSC433, AOSC633, CHEM433, or CHEM633. Formerly: AOSC434.

The effects of human activity on atmospheric composition, focused on global warming, the carbon cycle, air pollution, and the ozone layer. Fundamentals of atmosphereic chemistry (spectroscopy, kinetics, isotopic analysis, and biogeochemical cycles) are related to the modern understanding of climate change, air quality, and ozone depletion, based on resources such as satellite missions, field campaigns, and scientific assessments published by international agencies. We also examine how society's energy needs could be met, in the future, in a manner with less impact on atmospheric composition than the present heavy reliance on combusion of fossil fuels.

0101	Ross Salawitch	Seats (Total: 27)
	TuTh 2:00pm - 3:15pm	ATL 2416

AOSC472 **Mesoscale Meteorology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AOSC432, AOSC600, AOSC610, or AOSC470. Restriction: Non-degree-seeking students require the permission of the instructor. Also offered as: AOSC602. Credit only granted for: AOSC472 or AOSC602.

Survey a broad range of mesoscale meteorological features with emphasis on convection and associated phenomena. Define the mesoscale and understand its underlying principles; Introduce non-convective circulations and their importance for weather forecasting; Understand the precursors and occurrence of deep moist convection.

0101	Scott Rudlosky	Seats (Total: 10)
	MW 4:45pm - 6:00pm	ATL 3400

AOSC484 **Climate System Modeling**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as: AOSC684. Credit only granted for: AOSC484 or AOSC684.

Fundamentals in building computer models to simulate the components of the climate system: atmosphere, ocean ice, land-surface, terrestrial and marine ecosystems, and the biogeochemical cycles embedded in the physical climate system, in particular, the carbon cycle. Simple to state-of-the-art research models to tackle problems such as the Daisy World, El Nino and global warming.

0101	Ning Zeng	Seats (Total: 6)
	F 9:00am - 11:30am	ATL 1410

AOSC494 **Atmospheric and Oceanic Science Seminar**

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in AOSC431 and AOSC432.

Exposure to a wide range of contemporary topics in atmospheric, oceanic and climate sciences, to foster research interests and promote critical thinking through the weekly AOSC departmental seminar series.

0101	Instructor: TBA Th 3:30pm - 5:00pm	Seats (Total: 20) ATL 2400

AOSC498 **Senior Research Project II**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The project will be based on the research or development plan created i AOSC493. It may be completed with the approval of a faculty advisor in conjunction with an internship. Final written thesis and oral defense will be expected.

Contact department for information to register for this course.

AOSC499 **Special Problems in Atmospheric Science**

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Research or special study in the field of meteorology and the atmospheric and oceanic sciences.

Contact department for information to register for this course.

AOSC602 **Mesoscale Meteorology**

Credits: 3

Grading Method: Regular, Audit

Survey a broad range of mesoscale meteorological features with emphasis on convection and associated phenomena. Define the mesoscale and understand its underlying principles; Introduce non-convective circulations and their importance for weather forecasting; Understand the precursors and occurrence of deep moist convection.

0101	Scott Rudlosky MW 4:45pm - 6:00pm	Seats (Total: 15) ATL 3400

AOSC611 **Dynamics of the Atmosphere and Oceans II**

Credits: 3

Grading Method: Regular, Audit

Formerly: METO611.

Waves and instabilities in the atmosphere and the ocean. Gravity, Rossby, coastal and equatorial waves. Flow over topography. Dynamic instabilities including barotropic, baroclinic, inertial, and instabilities of the coupled ocean-atmosphere system. Stationary waves and multiple equilibria.

0101	Da-Lin Zhang MWF 11:00am - 11:50am	Seats (Total: 25) ATL 2416
AM01	Da-Lin Zhang MWF 11:00am - 11:50am	Seats (Total: 1) ATL 2416

AOSC617 **Atmospheric and Oceanic Climate**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: AOSC610; or permission of instructor. Formerly: METO617.

The general circulation of the atmosphere and oceans, historical perspective, observations, and conceptual models; wind-driven and thermohaline circulation of the oceans. Seasonal cycle and monsoon circulations; interannual to interdecadal climate variability; climate change.

0101	Sumant Nigam TuTh 12:30pm - 1:45pm	Seats (Total: 20) ATL 1114
AM01	Sumant Nigam TuTh 12:30pm - 1:45pm	Seats (Total: 1) ATL 1114

AOSC621 **Physics and Chemistry of the Atmosphere II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH462; or students who have taken courses with comparable content may contact the department. Formerly: METO621.

Spectroscopy; basic concepts in radiative transfer and atmospheric chemistry; photolysis rates for atmospheric molecules.

0101	Xin-Zhong Liang TuTh 9:30am - 10:45am	Seats (Total: 20) ATL 2428
AM01	Xin-Zhong Liang TuTh 9:30am - 10:45am	Seats (Total: 1) ATL 2428

AOSC633 **Atmospheric Chemistry and Climate**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CHEM131, CHEM135, or CHEM146. And MATH241; or permission of CMNS-Atmospheric & Oceanic Science department. Also offered as: CHEM633. Credit only granted for: AOSC433, AOSC633, CHEM433, or CHEM633. Formerly: AOSC658R.

The effects of human activity on atmospheric composition, focused on global warming, the carbon cycle, air pollution, and the ozone layer. Fundamentals of atmosphereic chemistry (spectroscopy, kinetics, isotopic analysis, and biogeochemical cycles) are related to the modern understanding of climate change, air quality, and ozone depletion, based on resources such as satellite missions, field campaigns, and scientific assessments published by international agencies. We also examine how society's energy needs could be met, in the future, in a manner with less impact on atmospheric composition than the present heavy reliance on combusion of fossil fuels.

0101	Ross Salawitch TuTh 2:00pm - 3:15pm	Seats (Total: 5) ATL 2416
AM01	Ross Salawitch TuTh 2:00pm - 3:15pm	Seats (Total: 0) ATL 2416

AOSC658E **Special Topics in Meteorology; Data Assimilation**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Various special topics in meteorology are given intensive study. The topic of concentration varies, from semester to semester and depends on student and faculty interests. Often, specialists from other institutions are invited to the campus on a visiting lectureship basis to conduct the course.

Contact department for information to register for this course.

AOSC684 **Climate System Modeling**

Credits: 3 Grading Method: Regular, Audit

Also offered as: AOSC484. Credit only granted for: AOSC484 or AOSC684.

Fundamentals in building computer models to simulate the components of the climate system: atmosphere, ocean ice, land-surface, terrestrial and marine ecosystems, and the biogeochemical cycles embedded in the physical climate system, in particular, the carbon cycle. Simple to state-of-the-art research models to tackle problems such as the Daisy World, El Nino and global warming.

0101	Ning Zeng F 9:00am - 11:30am	Seats (Total: 24) ATL 1410
AM01	Ning Zeng F 9:00am - 11:30am	Seats (Total: 0) ATL 1410

AOSC798 **Directed Graduate Research**

Credits: 1-3 Grading Method: Sat-Fail

Contact department for information to register for this course.

AOSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

AOSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ARAB Arabic Spring 2019

ARAB101 **Elementary Arabic I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Introduction to modern standard Arabic in both its spoken and written form. Equal emphasis on all four skill areas: speaking, listening, reading, and writing.

Contact department for information to register for this course.

ARAB105 **Elementary Modern Standard Arabic III-IV**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARAB104; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a fluent/native speaker of Arabic.

Continuation of ARAB104, developing further linguistic proficiency in Standard Arabic, both written and formal spoken. Covers an extended range of situation-based texts and topics that build vocabulary, grammar, general communicative competence and cultural awareness.

0101	Lutf Alkebsi MWF 10:00am - 11:50am	Seats (Total: 15) JMZ 0120
0201	Samah Al-salami MWF 10:00am - 11:50am	Seats (Total: 15) HJP 2118
0301	Samah Al-salami MWF 12:00pm - 1:50pm	Seats (Total: 15) HJP 2118

ARAB205 **Intermediate Modern Standard Arabic II**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: ARAB204; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a fluent/native speaker of Arabic.

Continuation of ARAB204, with exposure to a wide range of Arabic texts from different domains. Focus on vocabulary, more complex grammatical forms, and a better understanding of the formal aspects of using MSA as well as the cultural aspects of using the language.

0101	Zein El-Amine MWF 12:00pm - 1:50pm	Seats (Total: 15) HJP 3142
0201	Zein El-Amine MWF 10:00am - 11:50am	Seats (Total: 15) HJP 3142

ARAB207 **Egyptian Colloquial Arabic II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARAB206; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a fluent/native speaker of Arabic.

Further develops communicative skills and cultural knowledge in Egyptian Arabic, extending range of contexts and types of social interaction. Focuses on various aspects of Egyptian popular culture.

0101	Lutf Alkebsi MWF 1:00pm - 1:50pm	Seats (Total: 15) JMZ 1224

ARAB253 **The Arabian Nights and the Art of Storytelling**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Credit only granted for: ARAB 298B or ARAB253. Formerly: ARAB298B.

One Thousand and One Nights (Arabic Kitab alf laylah wa laylah; English The Arabian Nights) is a collection of stories and folk tales compiled in Arabic during the Islamic Golden Age, and explores how this text has shaped Western perceptions of the Arabic-Islamic world as well as its impact on the literary production of similar works in Europe and the Middle East. Taught in English.

0101	Sayed Elsisi	Seats (Total: 30)	
	TuTh 3:30pm - 4:45pm	JMZ 3205	

ARAB298K **Special Topics in Arabic Studies; Reformers, Radicals, and Revolutionaries: The Middle East in the Twentieth Century**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Language and content to be announced when course is offered.

Also offered as HIST245 and RELS219K. Credit granted for HIST245, ARAB298K, or RELS219K. The 20th century was a period of dramatic changes in the Middle East. Within the global context of the two World Wars and the Cold War, countries in the region struggled with the effects of colonialism and painful processes of decolonization. The course offers a thematic-comparative approach to issues such as social and political reform, nationalism, the colonial experience, independence struggles, models of governance, political violence, and Islamism. Course lectures and the analysis and discussion of primary sources will lead students to understand that the peoples of the Middle East found answers to the challenges posed by Western dominance based on their specific historical, cultural and socio-economic circumstances.

0101	Shay Hazkani	Seats (Total: 40)	
	MW 2:00pm - 3:15pm	SQH 1117	

ARAB305 **Advanced Modern Standard Arabic II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARAB304; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a fluent/native speaker of Arabic.

Further advanced grammar, reading, writing, speaking in Arabic; study of current issues within the Arab World.

0101	Valerie Anishchenkova	Seats (Total: 15)	
	TuTh 2:00pm - 3:15pm	HJP 2118	
	F 2:00pm - 2:50pm	HJP 2118	Lab

0201	Peter Glanville	Seats (Total: 15)	
	MW 3:00pm - 4:15pm	JMZ 1215	
	F 3:00pm - 3:50pm	JMZ 1215	Lab

ARAB386 **Experiential Learning**

Credits: 3-6 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-School of Languages, Literatures, and Cultures department.

Pre-professional experience in research, analysis and writing in a work setting. Project proposal approved by faculty and internship sponsor. Junior standing.

Contact department for information to register for this course.

ARAB398I **Special Topics in Arabic Studies; Secrets and Mysteries of Arabic Grammar**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

In-depth study of a particular aspect of Arabic culture, literature, and language. Specific topic to be announced when offered. Taught in Arabic.

Prerequisite: ARAB205. Taught in English.

0101	Valerie Anishchenkova	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	HJP 2118

ARAB399 **Independent Study In Arabic**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research and writing or specific readings on a topic selected by the student and supervised by a faculty member on the Department of Arabic Studies. To be planned during semester preceding registration.

Contact department for information to register for this course.

ARAB401 **Readings in Arabic Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARAB305; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not be a fluent/native speaker of Arabic.

A survey of Modern Arabic literature is given through a range of selected texts. Texts are studied as literature with constant reference to the social, cultural and political contexts in which they were written. Taught in Arabic.

0101	Sayed Elsisi TuTh 12:30pm - 1:45pm	Seats (Total: 15) JMZ 1117

ARAB499V **Special Topics in Arabic Studies; Business Arabic**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

In-depth study of particular aspect of Arabic culture, literature and language. Specific topic to be announced when course is offered.

Prerequisite: ARAB305 or permission from the department. Taught in Arabic.

0101	Lutf Alkebsi MW 3:00pm - 4:15pm	Seats (Total: 15) HJP 2118

ARCH Architecture Spring 2019

ARCH170 **Design Thinking and Architecture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA General Education: DSHU

Examines conceptual, perceptual, behavioral, and technical aspects of the built environment, and methods of analysis, problem-solving, and design implementation.

0101	Ronit Eisenbach W 9:00am - 9:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 19) ARC 0204 ONLINE ARC 1101	Discussion
0102	Ronit Eisenbach W 9:00am - 9:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 19) ARC 0204 ONLINE ARC 1103	Discussion
0103	Ronit Eisenbach W 9:00am - 9:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 19) ARC 0204 ONLINE ARC 1105	Discussion

0104	Ronit Eisenbach W 9:00am - 9:50am Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 19) ARC 0204 ONLINE ARC 1101	Discussion
0105	Ronit Eisenbach W 9:00am - 9:50am Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 19) ARC 0204 ONLINE ARC 1103	Discussion

ARCH200 **Design Media and Representation I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program.

Study of architectural representation in physical and digital design media. Examine visual literacy and visual communications through applied drawing, modeling and visual making to explore the role of design media and representation in design and design thinking.

0101	Matthew Geiss W 8:00am - 9:50am W 10:00am - 11:50am	Seats (Total: 20) Location: TBA Location: TBA	Discussion
0102	Matthew Geiss W 8:00am - 9:50am W 12:00pm - 1:50pm	Seats (Total: 20) Location: TBA Location: TBA	Discussion
0103	Matthew Geiss W 8:00am - 9:50am W 10:00am - 11:50am	Seats (Total: 20) Location: TBA Location: TBA	Discussion
0104	Matthew Geiss W 8:00am - 9:50am W 12:00pm - 1:50pm	Seats (Total: 20) Location: TBA Location: TBA	Discussion
0105	Matthew Geiss W 8:00am - 9:50am W 10:00am - 11:50am	Seats (Total: 20) Location: TBA Location: TBA	Discussion

0106	Matthew Geiss	Seats (Total: 20)	
	W 8:00am - 9:50am	Location: TBA	
	W 12:00pm - 1:50pm	Location: TBA	Discussion

ARCH225 **History of World Architecture I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Pre-1500 World Architecture survey course - History of Architecture structured to develop critical thinking and visually literacy with regard to the worldwide legacy of design thinking and cultural production through architecture

0101	Joseph Williams	Seats (Total: 125)
	TuTh 9:30am - 10:45am	ASY 2203

ARCH271 **People, Planet, and Profit: Building Sustainable Places**

Credits: 3 | Grading Method: Regular | General Education: DSSP

Also offered as: RDEV250. Credit only granted for: ARCH271 or RDEV250.

An introduction to the four disciplines represented in the School: architecture and urban design, community planning, historic preservation, and real estate development, that work to create a more sustainable environment for the future to create a more sustainable environment for the future using our interpretation of the quadruple bottom line: socio-cultural, economic, environmental, and design sustainability. Students will be provided with an understanding of the fundamental scholarship and processes of each of these disciplines and examine the intersections between them. Additionally, they will learn by applying the approaches of the four disciplines through a series of field studies.

Also offered as RDEV250. Credit granted for ARCH271 or RDEV250.

0101	Heidi Bulich	Seats (Total: 85)
	TuTh 11:00am - 12:15pm	ESJ 2204

ARCH289I **Sustainability at College Park**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE | General Education: DSNS, DSSP, SCIS

0101	Ralph Bennett	Seats (Total: 18)	
	Tu 5:00pm - 6:15pm	ARC 0204	
	Th 5:00pm - 6:15pm	ARC 1125	Discussion

0102	Ralph Bennett Tu 5:00pm - 6:15pm Th 5:00pm - 6:15pm	Seats (Total: 18) ARC 0204 ARC 1123	Discussion
0103	Ralph Bennett Tu 5:00pm - 6:15pm Th 5:00pm - 6:15pm	Seats (Total: 18) ARC 0204 ARC 1101	Discussion
0104	Ralph Bennett Tu 5:00pm - 6:15pm Th 5:00pm - 6:15pm	Seats (Total: 18) ARC 0204 ARC 1105	Discussion
0105	Ralph Bennett Tu 5:00pm - 6:15pm Th 5:00pm - 6:15pm	Seats (Total: 18) ARC 0204 ARC 1103	Discussion

ARCH386 **Experiential Learning**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail General Education: DSSP

Restriction: Must have learning proposal approved by faculty sponsor and student's internship sponsor; and sophomore standing or higher; and permission of ARCH-Architecture Program.

Learning experience tied to internship of specified duration with targeted learning outcomes.

0101	Michael Brick Contact instructor or department for details.	Seats (Total: 10)

ARCH400 **Architecture Design Studio I**

(Perm req)

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program; and permission of ARCH-Architecture Program.

Introduction to architectural design with particular emphasis on conventions and principles of architecture, visual and verbal communication skills, formal analysis, design process, spatial composition, architectural promenade, basic program distribution, and elementary constructional and environmental responses.

0101	Michael Abrams MWF 2:00pm - 6:00pm	Seats (Total: 90) Location: TBA

0102	Georgeanne Matthews MWF 2:00pm - 6:00pm	Seats (Total: 30) Location: TBA
0103	Joseph McKenley MWF 2:00pm - 6:00pm	Seats (Total: 30) Location: TBA
0104	Leah Ijjas MWF 2:00pm - 6:00pm	Seats (Total: 30) Location: TBA

ARCH402 **Architecture Design Studio III**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: Minimum grade of C- in ARCH401. Restriction: Must be in Architecture (B.S.) program.

Architectural design studio with emphasis on building and facade typologies, the development of architectural promenade and sequence, public and/or civic infill buildings dependent upon the architectural promenade, and urban housing types of varying densities. The architect's obligations to urban context are explored in many dimensions including historical, typological, and physical.

0101	Brittany Williams MWF 2:00pm - 6:00pm	Seats (Total: 54) Location: TBA
0102	Lindsey May MWF 2:00pm - 6:00pm	Seats (Total: 18) Location: TBA
0103	Robert Cole MWF 2:00pm - 6:00pm	Seats (Total: 18) Location: TBA
0104	Juan Burke, Brittany Williams MWF 2:00pm - 6:00pm	Seats (Total: 15) Location: TBA

ARCH405 **Graduate Architecture Design Studio II**

Credits: 6 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in ARCH404. Restriction: Must be in Architecture (Master's) program.

Architectural design studio with emphasis on building and facade typologies, the development of architectural promenade and sequence, public and/or civic infill buildings dependent upon the architectural promenade, and urban housing types of varying densities. The architect's obligations to urban context are explored in many dimensions including historical, typological, and physical. Offered spring only.

0101	Julie Gabrielli MWF 2:00pm - 6:00pm	Seats (Total: 14) Location: TBA

ARCH407 Graduate Architecture Design IV

Credits: 6 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in ARCH406. Restriction: Must be in Architecture (Master's) program.

Studio problems and theories concentrating on urbanism and urban design techniques. Issues and sites range from high-density urban in-fill to suburban and greenfield development in American and other contexts. Studio theories explore such topics as Contextualism, Neo-Traditional design, Transit Oriented Development, density, sustainable development, building typology, and street design.

A Fearless Ideas Course from the Academy for Innovation & Entrepreneurship (AIE): http://ter.ps/iamFEARLESS Click here for more information on the Fearless Ideas Courses.

0101	Antonio Pietro Latini MWF 2:00pm - 6:00pm	Seats (Total: 12) Location: TBA

ARCH408 Special Topics Architecture Design Studio

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Design Studio course to examine topical problems in architecture and urban design.

0101	James Tilghman MWF 2:00pm - 6:00pm	Seats (Total: 30) Location: TBA
0102	Ronit Eisenbach MWF 2:00pm - 6:00pm	Seats (Total: 18) Location: TBA
0103	Tonya Ohnstad MWF 2:00pm - 6:00pm	Seats (Total: 18) Location: TBA

0104	Instructor: TBA MWF 2:00pm - 6:00pm	Seats (Total: 15) Location: TBA

ARCH408F **Special Topics Architecture Design Studio**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Design Studio course to examine topical problems in architecture and urban design.

Contact department for information to register for this course.

ARCH419 **Independent Studies in Architectural Technology**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

2901	Instructor: TBA Contact instructor or department for details.	Seats (Total: 1)

ARCH420 **History of American Architecture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS

Prerequisite: ARCH221; or permission of ARCH-Architecture Program.

American architecture from the late 17th to the 21st century.

0101	CAROLINE HICKMAN TuTh 11:00am - 12:15pm	Seats (Total: 30) SQH 1105

ARCH425 **History of Architecture I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARCH-Architecture Program. Credit only granted for: ARCH225 or ARCH425. Additional information: Graduate architecture history course requires additional recitation section and additional coursework tied to survey lectures.

Pre-1500 World Architecture survey course - History of Architecture structured to develop critical thinking and visually literacy with regard to the worldwide legacy of design thinking and cultural production through architecture. Structured to nurture critical thinking and visually literacy with regard to the worldwide legacy of architecture. The work in the course will involve the evaluation of sources and arguments in reading architectural history. Architecture will be framed relative to ways of thinking, religious beliefs, cultural heritage, and cultural values.

0101	Joseph Williams	Seats (Total: 10)
	TuTh 9:30am - 10:45am	ASY 2203

ARCH427 **Theories of Architecture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARCH426; or permission of ARCH-Architecture Program. Restriction: Must be in Architecture (B.S.) program.

Survey of architectural theories - theories of architectural design, representation and urban design from antiquity to the present day.

0101	Christian Calleri	Seats (Total: 15)
	TuTh 7:00pm - 8:15pm	SQH 1111

ARCH428F **Selected Topics in Architectural History; History of Modern Architecture**

Credits: 3 Grading Method: Regular, Audit

Selected Topics in Architectural History

0101	Matthew Bell	Seats (Total: 15)
	TuTh 9:00am - 10:15am	ARC 1103

ARCH428W **Selected Topics in Architectural History; Writing Architecture in Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Architectural History

0101	Lindsey May	Seats (Total: 10)
	W 9:00am - 11:40am	ARC 1125

ARCH429 **Independent Studies in Architectural History**

Credits: 1-4

Grading Method: Regular, Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

ARCH445 **Visual Analysis of Architecture**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARCH400; or permission of ARCH-Architecture Program. Restriction: Must be in Architecture (B.S.) program.

Study of visual principles of architectural and urban precedents throug graphic analysis. Exercises include on-site observation, documentation and analysis. Focuses on the development of an architect's sketchbook as a tool for life-long learning.

0101	Michael Abrams W 10:00am - 12:40pm	Seats (Total: 30) ARC 1105

ARCH448V **Selected Topics in Visual Studies in Architecture; Survey**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Visual Studies in Architecture

Contact department for information to register for this course.

ARCH449 **Independent Studies in Visual Studies in Architecture**

Credits: 1-4

Grading Method: Regular, Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

0123	Joseph Williams Contact instructor or department for details.	Seats (Total: 1)

ARCH456 **Great Cities**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARCH-Architecture Program.

Case studies from a selection of the great cities of the world.

0101	Daniel Curry	Seats (Total: 19)
	TuTh 11:00am - 12:15pm	ARC 1115

ARCH458A **Selected Topics in Urban Design**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Urban Design

Contact department for information to register for this course.

ARCH463 **Sustainable Systems in Architecture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program.

Sustainable systems in architecture examines the nature of the global problem, environmental economics, understanding the local environment, bioclimatic design, solar control and shading, solar access zoning, residential scale energy design issues, commercial scale energy design issues, and urban scale energy design issues.

0101	Andrew Linn	Seats (Total: 120)
	TuTh 3:30pm - 4:45pm	ARC 0204

ARCH465 **Architectural Structures II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program. Credit only granted for: ARCH412 or ARCH465.

The basic principles of elastic behavior for different materials such as wood, steel, concrete, and composite materials and compares the properties and applications of materials generally will be covered. It investigates cross sectional stress and strain behavior in flexure and in shear, and torsion as well as the stability of beams and columns. The qualitative behavior of combined stresses and fracture in materials is also covered.

0101	Ming Hu	Seats (Total: 120)
	TuTh 9:30am - 10:45am	ARC 0204

ARCH470 **Computer Applications in Architecture**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ARCH400; or permission of ARCH-Architecture Program. Restriction: Must be in Architecture (B.S.) program.

Introduction to computer utilization, with emphasis on architectural applications.

0101	Scott Deisher	Seats (Total: 22)
	Tu 7:00pm - 9:30pm	ARC 1115
	Th 7:00pm - 8:15pm	ARC 1115

ARCH472 **Building Information Modeling Communication and Collaboration**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program; or must be in the Construction Project Management Minor. Credit only granted for: ARCH678I or ARCH472. Formerly: ARCH678I.

Building Information Modeling is explored as pertains to collaboration and communication in the design and construction of buildings and building systems. Practical and empirical learning using BIM software and case studies of real world projects and construction scenarios.

0101	Douglas Crawford	Seats (Total: 20)
	M 9:00am - 11:40am	ARC 1115

ARCH478B **Selected Topics in Architecture; Architecture in Italy: History and Preservation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Architecture

Contact department for information to register for this course.

ARCH478C **Selected Topics in Architecture; Careers in Architecture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Architecture

0101	Albert Rubeling	Seats (Total: 30)
	Tu 4:00pm - 6:30pm	ARC 1101

ARCH478G **Selected Topics in Architecture; The Villa and the Garden**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected Topics in Architecture

Contact department for information to register for this course.

ARCH478N **Selected Topics in Architecture; Weaving Objects, Weaving Buildings, Weaving Drawings**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Selected Topics in Architecture

This course aims to bring a team of students together to study the deep histories of weaving in human culture through precedent research, and to investigate the underlying orders of woven objects (hats, baskets) and structures (courtyard houses, stadiums and arenas, religious spaces, huts, nests) through the creation of two-dimensional drawings/diagrams.

0101	Andrew Linn	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	ARC 1123

ARCH478T **Selected Topics in Architecture; Ecological Design Thinking**

Credits: 3 Grading Method: Regular, Audit

Selected Topics in Architecture

0101	Julie Gabrielli	Seats (Total: 15)
	W 10:00am - 12:40pm	SQH 1101

ARCH479 **Independent Studies in Architecture**

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Contact department for information to register for this course.

ARCH601 **Topical Design Studio VI**

(Perm req)

Credits: 6 Grading Method: Regular, Audit

Restriction: Permission of ARCH-Architecture Program.

Topical architectural design studio with concentration on advanced topical inquiry addressing but not limited to: architectural competitions, sustainable design, theoretica/conceptual issues, programmatic, contextual, and/or technical issues.

Restricted to ARCH, URPD or ARCP majors.

0101	Peter Noonan	Seats (Total: 40)	
	MWF 2:00pm - 6:00pm	Location: TBA	Lab

ARCH628W **Selected Topics in Architectural History; Writing Architecture in Practice**

Credits: 3 Grading Method: Regular, Audit

Graduate Selected Topics in Architectural History

0101	Lindsey May	Seats (Total: 5)
	W 9:00am - 11:40am	ARC 1125

ARCH635 **Seminar in the History of Modern Architecture**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ARCH427; or permission of ARCH-Architecture Program.

Advanced investigation of historical problems in modern architecture.

0101	Matthew Bell	Seats (Total: 15)
	TuTh 9:00am - 10:15am	ARC 1103

ARCH654 **Urban Development and Design Theory**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ARCH-Architecture Program.

Advanced investigation into the history, and practice of urban design, planning, and development.

0101	Juan Burke	Seats (Total: 50)
	TuTh 11:00am - 12:15pm	ARC 1101

ARCH655 **Urban Design Seminar**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ARCH654; or permission of ARCH-Architecture Program. Credit only granted for: ARCH451 or ARCH655. Formerly: ARCH451.

Advanced investigation into problems of analysis and evaluation of the design of urban areas, spaces, and complexes with emphasis on physical and social considerations; effects of public policies through case studies. Field observations.

0101	Antonio Pietro Latini	Seats (Total: 15)
	TuTh 9:30am - 10:45am	ARC 1119

ARCH670 **Advanced Computer Applications in Architecture**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ARCH-Architecture Program. Credit only granted for: ARCH678C or ARCH670. Formerly: ARCH678C.

Advanced use of computer technology in design. Use of digital design processes and conceptual methodologies to study design alternatives and realization. Methods and techniques of digital design representation, simulation, or fabrication to explore and test concepts and integration of digital technologies into the architectural design process.

0101	Hiroshi Jacobs	Seats (Total: 15)
	W 7:00pm - 9:40pm	ARC 1115

ARCH678B **Advanced Selected Topics in Architecture; Health Scores: Community Design for Mattaponi, Maryland**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Graduate Selected Topics in Architecture.

0101	Jana VanderGoot	Seats (Total: 5)
	Tu 6:00pm - 8:40pm	ARC 1119

ARCH678N **Advanced Selected Topics in Architecture; Weaving Objects, Weaving Buildings, Weaving Drawings**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Graduate Selected Topics in Architecture.

This course aims to bring a team of students together to study the deep histories of weaving in human culture through precedent research, and to investigate the underlying orders of woven objects (hats, baskets) and structures (courtyard houses, stadiums and arenas, religious spaces, huts, nests) through the creation of two-dimensional drawings/diagrams.

0101	Andrew Linn	Seats (Total: 9)
	TuTh 2:00pm - 3:15pm	ARC 1123

ARCH678T **Advanced Selected Topics in Architecture; Ecological Design Thinking**

Credits: 3 Grading Method: Regular, Audit

Graduate Selected Topics in Architecture.

0101	Julie Gabrielli	Seats (Total: 15)
	W 10:00am - 12:40pm	SQH 1101

ARCH678W **Advanced Selected Topics in Architecture; ULI Seminar**

Credits: 3 Grading Method: Regular, Audit

Graduate Selected Topics in Architecture.

0101	Matthew Bell	Seats (Total: 5)
	Contact instructor or department for details.	

ARCH679 **Advanced Independent Studies in Architecture; Independent Study in Architecture**

Credits: 1-4 Grading Method: Regular, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Contact department for information to register for this course.

ARCH688C **Advanced Selected Topics in Architectural Technologies; Construction Automation & Robotics**

Credits: 3 Grading Method: Regular, Audit

Graduate Selected Topics in Architectural Technologies.

Also offered as ENCE622. Credit only granted for ENCE622 or ARCH688C.

0101	Miroslaw Skibniewski Tu 4:00pm - 6:40pm	Seats (Total: 25) JMP 2217

ARCH797 **Thesis Proseminar**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ARCH601.

Directed research and preparation of thesis program.

0101	James Tilghman M 9:00am - 11:40am	Seats (Total: 15) ARC 1105

ARCH798 **Thesis in Architecture**

(Perm req)

Credits: 3 Grading Method: Regular

Complements the research of ARCH 799, with presentation of the design research to student's thesis committee.

Contact department for information to register for this course.

ARCH799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Development of master's thesis.

Restricted to ARCH majors only.

Contact department for information to register for this course.

AREC Agricultural and Resource Economics Spring 2019

AREC326 **Intermediate Applied Microeconomics**

Credits: 3 Grading Method: Regular

Prerequisite: ECON200, AREC250, or AREC240; and ECON201. And MATH120, MATH130, MATH136, or MATH140; or must have completed MATH220. Credit only granted for: ECON306, ECON326, AREC489M, or AREC326. Formerly: AREC489M.

Deepens and broadens your ability to apply rigorous economic analysis skills to a broad range of problems.

0101	John Jensenius TuTh 11:00am - 12:15pm	Seats (Total: 45) BPS 0283	

AREC345 **Global Poverty and Economic Development**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP

This interdisciplinary course explores social and economic development around the world. Topics include geography, democratization, political instability and conflict, health and education, agricultural development, micro-entrepreneurship, and an introduction to impact evaluation methods used to evaluate the efficacy of public policy aimed at alleviating poverty.

0101	Snaebjorn Gunnsteinsson MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 40) TYD 1102 HBK 0109	Discussion
0102	Snaebjorn Gunnsteinsson MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 40) TYD 1102 HBK 0109	Discussion

AREC360 **Global Agriculture: Developing Extension Education & Agriculture Technologies in Africa**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of AGNR-Agricultural & Resource Economics department.

Identifies challenges faced by farmers in Nimba County, Liberia, and works collaboratively across borders to discuss these challenges and develop extension education programming that will be implemented in the region in order to empower local farmers. The course is designed to create a paradigm shift for both cohorts of students who will educate and learn from each other in what is now becoming a critical context - the globalized workspace. UMD and LICC students will be grouped together to identify and develop particular thematic areas most needed by local farmers, and then as a cohort create a week-long extension program to be implemented on the ground.

For more course information or to obtain permission to enroll, contact Jill Janofsky at jjanofsk@umd.edu.

0101	Taryn Devereux W 10:00am - 12:50pm	Seats (Total: 12) SYM 2200B	

AREC365 **World Hunger, Population, and Food Supplies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | , D | General Education: DVUP

An introduction to the problem of world hunger and possible solutions to it. World demand, supply, and distribution of food. Alternatives for leveling off world food demand, increasing the supply of food, and improving its distribution. Environmental limitations to increasing world food production.

0101	Kartik Misra	Seats (Total: 300)
	TuTh 2:00pm - 3:15pm	ARC 0204

AREC386 **Experiential Learning**

(Perm req)

Credits: 3-6 | Grading Method: Regular, Pass-Fail

Prerequisite: Permission of AGNR-Agricultural & Resource Economics department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

AREC388 **Honors Thesis Research**

(Perm req)

Credits: 3-6 | Grading Method: Regular

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

Contact department for information to register for this course.

AREC399 **Special Problems**

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Concentrated reading and study in some phase of a problem in agricultural and/or natural resource economics.

Contact department for information to register for this course.

AREC405 **Economics of Production**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ECON326 or AREC326; or students who have taken courses with comparable content may contact the department.

The use and application of production economics in analysis of firm and policy decisions. Production functions, cost functions, multiple product and joint production, and production processes through time.

0101	Robert Chambers	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	HBK 0103

AREC422 **Econometric Applications in Agricultural and Natural Resource Economics**

Credits: 3 Grading Method: Regular

Prerequisite: AREC326; or ECON326. Credit only granted for: ECON422, AREC422, or AREC489F. Formerly: AREC489F.

The main goal of this course is to equip students with valuable skills in econometrics and data analysis. Specifically, the main goal of the course is to teach you the basics of the theory and practice of econometrics, and to give you experience in estimating econometric models with actual data.

0101	Youpei Yan	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm	SYM 0215

AREC435 **Commodity Futures and Options**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: AREC326; or ECON326; or students who have taken courses with comparable content may contact the department.

The economics and institutional features of commodity futures and options markets. Students will develop a basic understanding of the underlying price relationships between cash and futures markets and will apply this information to business risk management decision making.

0101	Dale Johnson	Seats (Total: 40)
	MW 3:30pm - 4:45pm	HBK 0103

AREC454 **The Economics of Climate Change**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ECON326 or AREC326; or students who have taken courses with comparable content may contact the department. Credit only granted for: AREC454 or AREC489C. Formerly: AREC489C.

The role of economics in the formation of climate policy; basic concept of environmental economics including efficiency, externalities, and policy instruments; economic models of intertemporal decisions and decision making in the face of uncertainty. Applied economic analysis of specific issues and current policy initiatives.

0101	Anna Alberini	Seats (Total: 35)
	MW 3:00pm - 4:15pm	SYM 0215

AREC456 **Energy and Environmental Economics**

Credits: 3 Grading Method: Regular

Prerequisite: ECON326 or AREC326; or students who have taken courses with comparable content may contact the department. Credit only granted for: AREC456 or AREC489J. Formerly: AREC489J.

Economic theory and empirical methods are used to study problems of energy, the environment, and the economy. It examines the extraction, production, and use of energy and market institutions and regulatory approaches used to correct market failures. Topics covered include: oil and natural gas markets, management and design of electricity markets, renewable energy, non-market valuation , climate change, and transportation policies.

0101	Joshua Linn	Seats (Total: 80)
	TuTh 12:30pm - 1:45pm	SYM 0200

AREC481 **Environmental Economics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (AREC326, ECON326). Restriction: Must be in one of the following programs (Agricultural and Resource Economics; Agricultural and Resource Economics: Agribusiness; Environmental Science & Policy-Env Economics; Agricultural and Resource Economics: Environmental and Resource Economics). Credit only granted for: ECON481 or AREC481.

An exploration of the use of economic incentives for protection of the environment and the determination of appropriate (or efficient) level of environmental quality. Also covers the choice of policy instruments for the attainment of environmental standards.

0101	Roberton Williams	Seats (Total: 40)
	TuTh 9:30am - 10:45am	SYM 0200

AREC610 **Microeconomic Applications in Agricultural and Resource Markets**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603.

Applications of graduate level microeconomic analysis to the problems of agricultural and natural resource production and distribution including demand for agricultural output, the nature of agricultural supply decisions, decision making under uncertainty, valuation of natural resources, and exploitation of natural resources.

0101	Robert Chambers	Seats (Total: 25)	
	TuTh 9:30am - 10:45am Tu 3:30pm - 5:00pm	SYM 0215 KEY 0121	Discussion

AREC624 **Applied Econometrics II**

Credits: 4 Grading Method: Regular, Audit

Prerequisite: AREC623.

Variations of the standard linear model, simultaneous equations estimation, nonlinear regression, nonlinear simultaneous equations estimation, static and dynamic panel data models, errors in variables, Hausman tests, discrete choice models such as conditional multinomial and mixed logit models, latent class models, semi-parametric estimation, varying parameter models, unobserved variables, time series models, and model selection procedures.

0101	Anna Alberini	Seats (Total: 30)	
	MW 10:00am - 12:30pm F 10:00am - 12:00pm	SYM 0215 SYM 0115	Discussion

AREC699 **Special Problems in Agricultural and Resource Economics**

(Perm req)

Credits: 1-2 Grading Method: Regular, Audit

Intensive study and analysis of specific problems in the field of agricultural and resource economics, providing in-depth information in areas of special interest to the student.

Contact department for information to register for this course.

AREC783 **Environmental Taxation and Regulation**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603 and ECON604; and graduate-level econometrics. Credit only granted for: AREC783 or AREC869W. Formerly: AREC869W.

The economics of policies to address environmental externalities. Specific topics include the theory of public goods and externalities, cost-benefit and cost-effectiveness analysis of environmental regulations, regulatory instrument choice under uncertainty, environmental policy in an economy with pre-existing tax distortions, monitoring and enforcement of environmental regulations, distributional effects of environmental policy, and regulation of intertemporal externalities.

0101	Roberton Williams	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	PLS 1113

AREC784 **Energy Economics, Empirical Industrial Organization, and Public Policy**

Credits: 3 Grading Method: Regular

Prerequisite: ECON603, AREC623, and AREC624; or permission of instructor.

Energy markets and public policy, evaluating techniques for estimating market demand and supply and for evaluating policy intervention. Comparison of reduced-form and structural approaches. Applications may include but are not limited to electricity, oil and other liquid fuels, and household travel, with examples from the United States and other countries.

0101	Joshua Linn	Seats (Total: 25)
	TuTh 2:15pm - 3:30pm	SYM 0209

AREC799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

AREC815 **Experimental and Behavioral Economics**

Credits: 3 Grading Method: Regular

Prerequisite: AREC623, AREC624, ECON603, and ECON604; or equivalent. Credit only granted for: AREC815 or AREC869A. Formerly: AREC869A.

An overview of the design, implementation, and analysis of experiments motivated by behavioral economics, with a particular focus on experiments in field settings. Topics covered include social preferences, risk aversion, prospect theory, present bias, overconfidence, and limited attention.

0101	Neslihan Uler	Seats (Total: 25)
	MW 2:00pm - 3:15pm	SYM 0209

AREC898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

AREC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ARHU Arts and Humanities Spring 2019

ARHU158J **Explorations in Arts and Humanities; Who Belongs? Practices of Citizenship in U.S. Democracy**

Credits: 3 Grading Method: Regular General Education: DSSP

A first-year innovation and research experience. It introduces multiple disciplinary perspectives within a given theme to understand human beings, cultures and societies. Students will learn about key questions, concepts, methods, and practices within ARHU and will engage in original humanistic research while working with campus and college tools and resources.

Restricted to first semester freshmen in the College of Arts and Humanities. What does it mean to be a citizen? What are the rights and obligations of citizens in a democracy? Who grants these rights and obligations? This class will explore these questions by playing a historical simulation game, reading foundational primary texts from U.S. history and contemporary politics, and observing and participating in the College Park community. We will engage with history, philosophy, literature, and public rhetoric, and students will practice multiple modes of inquiry including role-play, debate, close reading, participant observation, and public writing.

0101	Kristjana Maddux	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	PAC 1815

ARHU269V **Special Topics in Study Abroad II; Vienna and Budapest Field Study**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ARHU275 **Writing to be Seen: Scriptwriting for Theatre, Film, and Television**

Credits: 3 Grading Method: Regular, Pass-Fail General Education: DSHU, DSSP

Also offered as: ENGL275. Credit only granted for: ENGL278D, ENGL275, ARHU319B or ARHU275. Formerly: ENGL278D; ARHU319B.

Introduction to theory and practice of scriptwriting with opportunity to read, view, evaluate, write, and revise texts meant to be performed for spectators. Practice writing for the stage, film and television, with emphasis on critical reading of textual and visual literary models. Theory and scholarship teaching opportunities and advantages of each format. Application of scholarship to analysis and critique of plays and texts successful across two different formats. Examination of selected scripts, performances, and film and television clips as models for students' own creative work. Frequent writing exercises and use of workshop format.

0101	Liam Daley MWF 10:00am - 10:50am	Seats (Total: 15) KEY 0120
0102	Liam Daley MWF 10:00am - 10:50am *This section is restricted to students in the Jimenez-Porter Writers' House.*	Seats (Total: 5) KEY 0120

ARHU286 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Permission of ARHU-College of Arts & Humanities. Restriction: Minimum cumulative GPA of 2.5; and must be in a major or minor in ARHU - College of Arts and Humanities; and must have earned a minimum of 12 credits; and must not have earned more than 60 credits.

Designed for students who have completed fewer than 60 credits, students who are in their first semester at the University of Maryland, and/or students who wish to complete legislative internships, research-based internships, some start-up internships and some remote internships. All students must be enrolled in an ARHU major or minor and the internship must be in one of the academic fields covered within the College of Arts and Humanities. In addition to completing their required hours on site, students with fewer than 60 credits and students who are in their first semester at the University of Maryland will be required to attend three bi-weekly seminars at the beginning of the semester to help develop their para-professional goals and understandings.

0101	Paula Nadler Contact instructor or department for details.	Seats (Total: 10)

ARHU318A **Writers' House Colloquium: Creative Writing Across Languages and Cultures; Poetry Colloquium**

(Perm req)

Credits: 1 Grading Method: Regular

Colloquium designed to improve students' skills in literary and communication arts through lectures and discussions on the history and craft of writing across cultures. Topics for the different versions of ARHU 318 include poetry, fiction, writing for different media, autobiography and memoir, scriptwriting, screenwriting, and community engagement projects.

0101	Jessica Hammack	Seats (Total: 15)
	W 7:00pm - 8:15pm	QAN 1132

ARHU318B **Writers' House Colloquium: Creative Writing Across Languages and Cultures; Prose Colloquium**

(Perm req)

Credits: 1 Grading Method: Regular

Colloquium designed to improve students' skills in literary and communication arts through lectures and discussions on the history and craft of writing across cultures. Topics for the different versions of ARHU 318 include poetry, fiction, writing for different media, autobiography and memoir, scriptwriting, screenwriting, and community engagement projects.

Restricted to Jimenez-Porter Writers' House Students

0101	Vivianne Salgado	Seats (Total: 15)
	W 5:30pm - 6:45pm	QAN 1132

ARHU318W **Writers' House Colloquium: Creative Writing Across Languages and Cultures; Screenwriting/Scriptwriting**

(Perm req)

Credits: 1 Grading Method: Regular

Colloquium designed to improve students' skills in literary and communication arts through lectures and discussions on the history and craft of writing across cultures. Topics for the different versions of ARHU 318 include poetry, fiction, writing for different media, autobiography and memoir, scriptwriting, screenwriting, and community engagement projects.

Restricted to Jimenez-Porter Writers' House students.

0101	Heidi Scott	Seats (Total: 15)
	W 4:00pm - 5:15pm	ASY 3211

ARHU319C **Writers' House Second Year Colloquium: Form and Theory of Creative Writing; Spoken Word**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSHU, DSSP

Required course for Writers' House students pursuing the notation program. Offered in either poetry or imaginative prose writing. Students work at the intermediate level, refining creative writing skills through cross-cultural reading and writing exercises. As part of the course, students attend a series of lectures and readings given by professional writers.

For further details, please contact Johnna Schmidt jmschmid@umd.edu.

0101	Naliyah Kaya W 3:30pm - 6:00pm	Seats (Total: 15) SSU 1121

ARHU320 **Writers' House Second Year Colloquium: Writing for Publication**

(Perm req)

Credits: 3 Grading Method: Regular

Recommended: Completion of ARHU318 and ARHU319 recommended. Restriction: Currently enrolled in Writers' House or permission of program. Credit only granted for: ARHU319A or ARHU320. Formerly: ARHU319A.

Students write, discuss and revise for multiple forms of publication: reading their own work at least once in public, sending work out for publication to literary journals, and producing a chapbook of high quality by end of semester.

0101	Johnna Schmidt F 2:00pm - 4:30pm	Seats (Total: 30) TWS 1320

ARHU338 **Undergraduate Teaching Assistantship in a Living Learning Program**

(Perm req)

Credits: 3 Grading Method: Regular

Offers exceptional students the opportunity to work closely with a faculty member and gain valuable experience. ARHU Living learning program UTAs also serve as peer mentors and program leaders. They assist with course planning, research, and student advising (as appropriate). We are also allowing for variable credit (1-3 cr hrs).

0101	Johnna Schmidt Contact instructor or department for details.	Seats (Total: 5)
0102	Jason Farman Contact instructor or department for details.	Seats (Total: 2)

ARHU386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail General Education: DSSP

Prerequisite: Permission of ARHU-College of Arts & Humanities. Restriction: Junior standing or higher.

0201	Paula Nadler Contact instructor or department for details.	Seats (Total: 25)

ARHU468 **Peer Mentoring Program**

(Perm req)

Credits: 1 Grading Method: Regular

A workshop for sophomore, junior or senior students who wish to serve a peer mentors helping first-year students to cope with the numerous issues which often arise in the transition to the university.

Restricted to ARHU upperclassmen who will serve as peer mentors to help transition new students to the university. Interested students must apply to become a peer mentor.

0101	J Darius Greene	Seats (Total: 35)
	M 4:00pm - 5:30pm	KEY 0103

ARHU486 **Internship Practicum in Arts and Humanities**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Have completed previous internship at U of MD. Restriction: Must be in a major in ARHU-College of Arts & Humanities; and permission of ARHU-College of Arts & Humanities; and minimum cumulative GPA of 2.5; and must have earned a minimum of 60 credits; and completed 12 credits at U of MD.

An internship intended for students who have already completed an internship for credit. ARHU486 must be a different experience from the internship students have already taken for credit. Generally students intern with a different company, but they may continue working for the same company if the job is significantly different. See ARHU internship coordinator for details.

0101	Paula Nadler	Seats (Total: 20)
	Contact instructor or department for details.	

ARHU489 **Advanced Internship Practicum in ARHU**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Designed for students who have already completed at least 2 upper level internship courses for academic credit. It is an advanced practicum to assist students in continuing to develop and hone their professional writing, presentation and analytical skills.

0101	Paula Nadler	Seats (Total: 2)
	Contact instructor or department for details.	

ARMY Army Spring 2019

ARMY105 **Basic Military Science II**

Credits: 3 Grading Method: Regular

Credit only granted for: ARMY119 or ARMY105.

Exploration of the Army Leadership Model through classroom instruction, leadership training and mentorship. Develops knowledge and competency in physical fitness through rigorous training and experiential leadership education through leadership laboratories.

0101	Larry Rentz TuTh 9:30am - 10:45am	Seats (Total: 40) EGR 3106
0102	Larry Rentz MWF 9:00am - 9:50am	Seats (Total: 40) PLS 1119

ARMY202 **Military Leadership in Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This course uses the case study method to examine the Army Leadership Model as applied to assigned missions in U.S. history. Students learn to evaluate and assimilate effective leadership methods and techniques. Includes a laboratory period in which case studies are worked out and presented by individuals and groups.

0102	Larry Rentz, Alama Rush, Heather Hunkus TuTh 2:00pm - 3:15pm	Seats (Total: 40) ESJ 1215

ARMY302 **Advanced Military Leadership II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prepares contracted students for certification at the Army National Advance Camp, a prerequisite for commissioning as an officer in the U.S. Army. Focus is directed to military tactics, squad and platoon drills, marksmanship, land navigation and fitness excellence. Includes a laboratory period in applied leadership skills as well as a three day field exercise.

0101	Larry Rentz	Seats (Total: 40)	
	Tu 3:30pm - 6:15pm	HJP 2242	
	Th 4:00pm - 6:00pm	ARM 0131	Lab
	MWF 6:30am - 7:30am	ARM 0131	Lab

ARMY402 **Advanced Military Leadership IV**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The military system and code of ethics in the military environment is studied. Topics include code of conduct during all forms of military operations, the Geneva Conventions and the ethical decision making process. Also includes a laboratory in applied leadership skills, fitness excellence and two field exercises.

0101	Larry Rentz	Seats (Total: 30)	
	MW 12:30pm - 1:45pm	ESJ 1309	
	Th 4:00pm - 6:00pm	ARM 0131	Lab
	MWF 6:30am - 7:30am	ARM 0131	Lab

ARSC Air Science Spring 2019

ARSC059 Air Force Officer Lab

Credits: 1 Grading Method: Sat-Fail

Offers Air Force ROTC cadet officer's practical experience in military leadership, management, organization, and customs. May include visits to military installations, weekend laboratories, and flight orientation.

Restriction: Must be an AFROTC cadet. Repeatable to 10 credits if content differs. Additional information: This course does not carry any credit toward any degree at the University.

0101	Samuel Richardson	Seats (Total: 250)
	Th 7:00am - 8:50am	ARM 0126
	Course meets in front of COL. Contact instructor for details.	

ARSC101 The USAF Today II

Credits: 1 Grading Method: Regular

Corequisite: AFROTC cadets must also register for ARSC059.

Freshman course for AFROTC. Continuation of ARSC100 for freshmen AFROTC cadets. Study of topics relating to the Air Forces and defense. Focuses on organizational structure and missions of the Air Force; officership and an introduction to both written and oral communication skills.

0101	Karson Peterson	Seats (Total: 22)
	Tu 9:00am - 9:50am	HBK 0109
0102	Karson Peterson	Seats (Total: 90)
	Th 9:00am - 9:50am	CHM 1402

ARSC201 The Development of Air Power II

Credits: 1 Grading Method: Regular

Corequisite: AFROTC cadets must also register for ARSC059.

Continuation of ARSC 200 for sophomore AFROTC cadets. The study of historical events, leaders, and technical developments which surrounded the growth of air power; the basics of leadership; environment of an Air Force officer; and concepts of ethical behavior.

0101	Samuel Richardson Th 10:00am - 10:50am	Seats (Total: 49) PHY 4221
0103	Samuel Richardson Tu 10:00am - 10:50am	Seats (Total: 25) ARM 0118

ARSC301 **Management and Leadership II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Corequisite: AFROTC cadets must also register for ARSC059; or permission of UGST-AFROTC-Air Science. Restriction: Junior standing or higher.

Continuation of ARSC300. Study of leadership and management skills and leadership ethics as well as written and oral communication skills required of Air Force officers. This course will satisfy credit towards a minor in military studies.

0101	Zachary Crampton Th 9:00am - 12:00pm	Seats (Total: 50) SQH 1117
0102	Zachary Crampton TuTh 12:30pm - 2:00pm	Seats (Total: 18) ARM 0118
0103	David Bacot MW 9:00am - 10:30am	Seats (Total: 15) ARM 0118

ARSC401 **National Security Forces in Contemporary American Society II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARSC300 or ARSC301; or permission of UGST-AFROTC-Air Science. Corequisite: ARSC059; or permission of UGST-AFROTC-Air Science. Restriction: Senior standing.

This course examines various subjects including: military law/justice, preparation for active duty, and current issues affecting military professionalism. This course will satisfy credit towards a minor in military studies.

0101	Isham Nichols Th 9:00am - 12:00pm	Seats (Total: 25) ARM 0118	
0102	Isham Nichols TuTh 2:00pm - 3:30pm	Seats (Total: 18) ARM 0118	
0103	David Bacot MW 2:00pm - 3:30pm	Seats (Total: 15) ARM 0118	

ARTH Art History & Archaeology Spring 2019

ARTH169B **Special Topics in Study Abroad I; Arts of Modernity**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ARTH169I **Special Topics in Study Abroad I; Art of Rome**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ARTH200 **Art and Society in Ancient and Medieval Europe and the Mediterranean**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA General Education: DSHU, DVUP

Examines the material culture and visual expressions of Mediterranean and European societies from early times until ca. 1300 CE, emphasizing the political, social, and religious context of the works studied, the relationships of the works to the societies that created them, and the interrelationship of these societies.

0101	Maryl Gensheimer MW 11:00am - 11:50am M 9:00am - 9:50am	Seats (Total: 25) ASY 2203 ASY 3219	 Discussion
0102	Maryl Gensheimer MW 11:00am - 11:50am W 10:00am - 10:50am	Seats (Total: 25) ASY 2203 ASY 3215	 Discussion

0103	Maryl Gensheimer MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 25) ASY 2203 ASY 3215	Discussion
0104	Maryl Gensheimer MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 25) ASY 2203 ASY 3215	Discussion
0106	Maryl Gensheimer MW 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 25) ASY 2203 ASY 3215	Discussion

ARTH201 **Art and Society in the West from the Renaissance to the Present**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA | General Education: DSHU, DVUP

Examines representative European and American works of art from the later Middle Ages to the present, highlighting the dynamic exchange between artistic and cultural traditions both within periods and across time.

0101	Steven Mansbach MW 9:00am - 9:50am M 10:00am - 10:50am	Seats (Total: 25) ASY 2203 ASY 3207	Discussion
0103	Steven Mansbach MW 9:00am - 9:50am W 10:00am - 10:50am	Seats (Total: 25) ASY 2203 ASY 3211	Discussion
0104	Steven Mansbach MW 9:00am - 9:50am W 11:00am - 11:50am	Seats (Total: 25) ASY 2203 ASY 3219	Discussion
0105	Steven Mansbach MW 9:00am - 9:50am F 10:00am - 10:50am	Seats (Total: 25) ASY 2203 ASY 3211	Discussion

ARTH255 **Art and Society in the Modern American World**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA, D | General Education: DSHU, DVUP

Explores the origins and evolution of art in the modern American world, from the late colonial era to the present, comparing major artistic movements and their historical contexts. Considers the diversity of art across Latin America and the United States, and the ways in which artworks mediate social, ethnic, political, and national identities.

0103	Jordana Saggese MW 10:00am - 10:50am M 11:00am - 11:50am	Seats (Total: 25) ASY 2203 ASY 3211	 Discussion
0104	Jordana Saggese MW 10:00am - 10:50am W 9:00am - 9:50am	Seats (Total: 25) ASY 2203 ASY 3215	 Discussion

ARTH269A **Special Topics in Study Abroad II; Archaeology and Art of Ancient Italy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ARTH269P **Special Topics in Study Abroad II; From Medieval to Contemporary: Exploring the Great Art and Architecture of Prague**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ARTH269R **Special Topics in Study Abroad II; Art of Renaissance**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ARTH300 **Egyptian Art and Archaeology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Sites and monuments of painting, sculpture, architecture, and the minor arts of ancient Egypt from earliest times through the Roman conquest. Emphasis on the pharaonic period.

0101	Emily Egan	Seats (Total: 15)
	TuTh 9:30am - 10:45am	ASY 3215

ARTH301 **Aegean Art and Archaeology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Sites and monuments of painting, sculpture, architecture, and the minor arts of Crete, the Cycladic islands, and the Greek mainland from the earliest times to the downfall of the Mycenaean empire.

0101	Emily Egan	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	ASY 3215

ARTH320 **Fourteenth and Fifteenth-Century Northern European Art**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The art of northern Europe with an emphasis on painting in the Netherlands and France.

0101	Louise Martinez	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	ASY 3211

ARTH335 **Seventeenth-Century Art in the Netherlands**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Painting, sculpture and architecture in seventeenth-century Netherlands

0101	Aneta Georgievska-Shine	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ASY 3211

ARTH369C **Special Topics in Study Abroad III; The Art of Florence: Exploring Visual Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ARTH369E **Special Topics in Study Abroad III; The Business of Art: the Economics and Management of Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ARTH369M **Special Topics in Study Abroad III; Michelangelo**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ARTH369Q **Special Topics in Study Abroad III; Patrons and Artists in Baroque Italy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ARTH386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail General Education: DSSP

Prerequisite: Permission of ARHU-Art History & Archaeology department. Restriction: Junior standing or higher.

Supervised internship experience in diverse areas of art historical, archaeological, and museological work.

Contact department for information to register for this course.

ARTH389A **Special Topics in Art History and Archaeology; The Art of Drawing: A Left and Right Brain Experience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Beryl Bland	Seats (Total: 10)
	W 2:00pm - 4:30pm	ASY 3215

ARTH389B **Special Topics in Art History and Archaeology; The Art of Color: A Left and Right Brain Experience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Beryl Bland F 10:00am - 12:30pm	Seats (Total: 10) ASY 2318

ARTH389K **Special Topics in Art History and Archaeology; Curating Change: Latin American Art at the Inter-American Development Bank**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

This course considers the relationship between art and development - social and economic - through the IDB's Art Collection. Our focus falls on the historical development of modern Latin American art through the twentieth century, from Mexican Muralism and indigenismo to Surrealism and Neo-figuration.

0101	Abigail McEwen Th 2:00pm - 4:30pm	Seats (Total: 25) ASY 3219

ARTH389Q **Special Topics in Art History and Archaeology; Classic Foreign Films**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Also offered as FILM359X. Credit only granted for ARTH389Q and FILM359X. Students will explore classic foreign films from India, Japan, China, France, Italy, Germany, Denmark, Sweden, Russia, and other countries. This course is designed to enable students to examine historically and artistically significant films made since 1945 by some of the most important directors in world cinema.

0101	Jason Kuo M 1:00pm - 3:30pm	Seats (Total: 25) HBK 0302J

ARTH389T **Special Topics in Art History and Archaeology; Renaissance Venice**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

0101	Aneta Georgievska-Shine TuTh 2:00pm - 3:15pm	Seats (Total: 15) ASY 3215

ARTH389W **Special Topics in Art History and Archaeology; Professional Writing in Art History: Museum Communications**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Through weekly colloquia and workshops, students will hone their skills in professional writing, with particular attention paid to clarity and effectiveness in articulating an argument or point of view. Additonally, they will learn from museum and heritage professionals about crafting grant proposals, press releases, social media and marketing plans, and exhibition wall texts and labels.

0101	Caroline Paganussi	Seats (Total: 12)
	TuTh 9:30am - 10:45am	ASY 4304

ARTH488G **Colloquium in Art History; Art and the Environment**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Colloquium to investigate a specific topic in depth.

Not open to those who have already taken ARTH465 (fall 17, spring 15, spring 12)

0101	Joshua Shannon	Seats (Total: 20)
	F 1:00pm - 3:30pm	Location: TBA
	Class meets at The Phillips Collections University of Maryland Center for Art and Knowledge Center Studio 1600 21st Street, NW Washington, DC 20009.	

ARTH488J **Colloquium in Art History; Japanese Art in the 20th Century: Empire War & Occupation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Colloquium to investigate a specific topic in depth.

Learn how art played a role in building the Japanese empire, supporting the war effort, and rebuilding the nation after defeat. Discover the relation between art, power and politics. See how contemporary Japanese artists incorporate modern history into their art. Handle archival materials and artworks with your own hands.

0101	Alicia Volk	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	ASY 3217

ARTH488N **Colloquium in Art History; Dead or Alive? Still Life Painting, 1870-Today**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Colloquium to investigate a specific topic in depth.

0101	Ashley Lazevnick W 2:00pm - 4:30pm	Seats (Total: 10) ASY 3217

ARTH489J **Special Topics in Art History; Death in the Biblical World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Death, burial and concepts of the afterlife in the ancient Mediterranean cultures with a particular focus on ancient Israel and early Judiasm. Source material, both texts and artifacts, will be examined within the contexts of the ancient Near East (Egypt and Mesopotamia) and the Classical World (Greece and Rome). Also offered as JWST409F. Credit granted for ARTH489J or JWST409F.

0101	Matthew Suriano Tu 4:00pm - 6:00pm Contact instructor or department for details.	Seats (Total: 10) SQH 1123

ARTH489Q **Special Topics in Art History; Global Art Cinemas**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Global art cinemas often challenge their audiences and demand more active engagement because of their unconventional modes of story-telling and their emphases on the directors' personal expressions. Students will critically examine some of the most talked-about and engaging art films, with special attention to the influence of art history on the films of Wong Kar-Wai, Zhang Yimou, Jia Zhangke, Kurosawa, Ozu. Visconti, Resnais, Greenaway, Tarkovsky, del Toro, Potter, Varda, Tarantino, Scorsese, and others. Also offered as FILM429G. Credit granted for ARTH489Q or FILM429G.

0101	Jason Kuo TuTh 12:30pm - 1:45pm	Seats (Total: 15) HBK 0302J

ARTH489Z **Special Topics in Art History; Art in London**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

ARTH498 **Directed Studies in Art History I**

(Perm req)

Credits: 2-3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

ARTH499 **Honors Thesis**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

ARTH738E **Seminar in Seventeenth-Century Southern European Art; Proportion, Distortion and Visual Experience in Art-Early Modernity to Neoclassicism**

Credits: 3

Grading Method: Regular, Audit

Proportion is a structuring concept not only of Western art but also of Western culture from antiquity through the Enlightenment and beyond.

0101	Anthony Colantuono	Seats (Total: 6)
	Th 12:00pm - 2:30pm	ASY 4304

ARTH759J **Seminar in Twentieth-Century Art; Photography Since Conceptual Art**

Credits: 3

Grading Method: Regular, Audit

This course offers a scholarly overview of the many artistic uses of photography since the late 1960s. Students will read criticism, theory, and history and will closely study individual works of art. Students will be encouraged to write essays on artworks they can visit in person.

0101	Joshua Shannon	Seats (Total: 6)
	W 3:00pm - 5:30pm	ASY 4304

ARTH759K **Seminar in Twentieth-Century Art; Avant-Gardes in "East" And "West"**

Credits: 3

Grading Method: Regular, Audit

0101	Steven Mansbach	Seats (Total: 6)
	M 12:00pm - 2:30pm	ASY 4304

ARTH798 **Directed Graduate Studies in Art History**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Contact department for information to register for this course.

ARTH799 **Master's Thesis Research**

(Perm req)

Credits: 1-6

Grading Method: Regular

Contact department for information to register for this course.

ARTH898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ARTH899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ARTT Art Studio Spring 2019

ARTT100 **Two-Dimensional Design Fundamentals**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Principles and elements of two-dimensional design. Introduction to visual communication.

Students must pay a $40.00 studio lab fee.

0301	Wendy Jacobs MW 12:30pm - 3:00pm	Seats (Total: 18) ASY 2318	Lab
0401	Wendy Jacobs MW 12:30pm - 3:00pm	Seats (Total: 18) ASY 2318	Lab
0501	Wendy Jacobs MW 3:30pm - 6:00pm	Seats (Total: 18) ASY 2318	Lab
0601	Wendy Jacobs MW 3:30pm - 6:00pm	Seats (Total: 18) ASY 2318	Lab
0701	James Thorpe TuTh 12:30pm - 3:00pm	Seats (Total: 18) ASY 2318	Lab
0801	James Thorpe TuTh 12:30pm - 3:00pm	Seats (Total: 18) ASY 2318	Lab

ARTT110 **Elements of Drawing I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Fundamental concepts, media, and processes of drawing. Emphasis on observation and representation in combination with individual expression. Subject matter includes still life, human figure, nature, the built environment, and conceptual projects.

Students must pay a $40.00 studio lab fee.

0101	Jowita Wyszomirska TuTh 9:00am - 11:30am	Seats (Total: 18) ASY 2317	Lab
0201	Jowita Wyszomirska TuTh 9:00am - 11:30am	Seats (Total: 18) ASY 2321	Lab
0301	Clayton Dunklin MW 3:30pm - 6:00pm	Seats (Total: 18) ASY 2317	Lab
0401	Clayton Dunklin MW 3:30pm - 6:00pm	Seats (Total: 18) ASY 2321	Lab
0501	Jowita Wyszomirska TuTh 12:30pm - 3:00pm	Seats (Total: 18) ASY 2317	Lab
0601	Jowita Wyszomirska TuTh 12:30pm - 3:00pm	Seats (Total: 18) ASY 2321	Lab
0701	Rachel Scully MW 12:30pm - 3:00pm	Seats (Total: 18) ASY 2317	Lab
0801	Rachel Scully MW 12:30pm - 3:00pm	Seats (Total: 18) ASY 2321	Lab
0901	Irene Pantelis MW 9:00am - 11:30am	Seats (Total: 18) ASY 2317	Lab
1001	Irene Pantelis MW 9:00am - 11:30am	Seats (Total: 18) ASY 2321	Lab

ARTT150 **Introduction to Art Theory**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA | General Education: DSHU

Fundamental concepts of global, philosophic, and critical art theory examined through various historic and contemporary texts, and the analysis of works of art.

0101	Monroe Isenberg MW 1:00pm - 1:50pm M 12:00pm - 12:50pm	Seats (Total: 25) ASY 2309 ASY 3215	Discussion
0102	Monroe Isenberg MW 1:00pm - 1:50pm W 12:00pm - 12:50pm	Seats (Total: 25) ASY 2309 ASY 3219	Discussion
0103	Monroe Isenberg MW 1:00pm - 1:50pm W 2:00pm - 2:50pm	Seats (Total: 25) ASY 2309 ASY 3211	Discussion
0201	Rex Weil TuTh 3:30pm - 4:20pm Th 2:00pm - 2:50pm	Seats (Total: 25) TWS 1100 ASY 3203	Discussion
0202	Rex Weil TuTh 3:30pm - 4:20pm Tu 12:30pm - 1:20pm	Seats (Total: 25) TWS 1100 ASY 3219	Discussion
0203	Rex Weil TuTh 3:30pm - 4:20pm Th 12:30pm - 1:20pm	Seats (Total: 25) TWS 1100 ASY 3219	Discussion

ARTT200 **Three-Dimensional Art Fundamentals**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT100 and ARTT110.

Fundamental concepts of three-dimensional form and space examined through the manipulation and organization of various materials.

Students must pay a $40.00 studio lab fee.

0101	Foon Sham TuTh 12:30pm - 3:00pm	Seats (Total: 18) ASY 1311	Lab
0201	Cy Keener MW 9:00am - 11:30am	Seats (Total: 18) ASY 1311	Lab

0301	Mason Hurley TuTh 9:00am - 11:30am	Seats (Total: 18) ASY 1311	Lab

ARTT210 **Elements of Drawing II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT110.

Continuation of ARTT110 with additional emphasis on color, figure drawing, and contemporary issues.

Students must pay a $40.00 studio lab fee.

0101	Rachel Scully MW 3:30pm - 6:00pm	Seats (Total: 16) ASY 2315	Lab
0201	Emily Conover TuTh 3:00pm - 5:30pm	Seats (Total: 16) ASY 2315	Lab
0301	Leah Lewman MW 12:30pm - 3:00pm	Seats (Total: 16) ASY 2315	Lab

ARTT255 **Introduction to Digital Art and Design Processes**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT100 and ARTT110. Credit only granted for: ARTT255 or ARTT354. Formerly: ARTT354.

Introduction to basic software and principles of digital imaging, and how they are applied to art and design. Topics covered: Digital image construction and manipulation, Vector-Based digital techniques layout, typography, etc), time-based digital techniques (video and audio composition and manipulation), and basic interactivity (web-design). Digital media used to explore visual principles established in ARTT100.

Students must pay a $40.00 studio lab fee.

0101	Clayton Dunklin MW 12:30pm - 3:00pm	Seats (Total: 24) ATL 1410	Lab
0201	Narendra Ratnapala TuTh 12:30pm - 3:00pm	Seats (Total: 24) ATL 1410	Lab

0301	Narendra Ratnapala TuTh 9:00am - 11:30am	Seats (Total: 14) ASY 3304	Lab

ARTT260 **Dangerous Art: Censorship or Subsidy**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Combines a broad historical analysis of the relationship between art and authority with an examination of contemporary culture criticism and art practice. Explores the uses and abuses of art and culture in totalitarianand theocratic states as a prelude to a review of the role of official culture in the United States. Examines art and culture in the public arena and many related areas where the arts and policy interact.

0101	Rex Weil TuTh 6:00pm - 7:15pm	Seats (Total: 60) ASY 2309

ARTT320 **Elements of Painting**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Concepts and fundamental processes of oil and/or acrylic painting.

Students must pay a $40.00 studio lab fee.

0101	Leslie Berns MW 12:30pm - 3:00pm	Seats (Total: 18) ASY 3318	Lab
0201	Emily Conover TuTh 12:30pm - 3:00pm *This section uses acrylic paint only.*	Seats (Total: 18) ASY 3316	Lab
0301	Matthew Robertson MW 9:00am - 11:30am	Seats (Total: 12) ASY 3322	Lab

ARTT330 **Elements of Sculpture: Metal Casting**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Sculptural concepts and fundamental processes related to metal casting.

Students must pay a $40.00 studio lab fee.

0101	John Ruppert	Seats (Total: 12)	
	MW 12:30pm - 3:00pm	ASY 1310	Lab

ARTT330H **Elements of Sculpture: Metal Casting**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Sculptural concepts and fundamental processes related to metal casting.

Restricted to Departmental Honors students only. Students must pay a $40.00 studio lab fee.

0101	John Ruppert	Seats (Total: 2)	
	MW 12:30pm - 3:00pm	ASY 1310	Lab

ARTT331 **Elements of Sculpture: Steel**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Sculptural concepts and fundamental processes related to steel fabrication; torch cutting, welding, hot forging, and finishing.

Students must pay a $40.00 studio lab fee.

0101	John Ruppert	Seats (Total: 10)	
	MW 3:00pm - 5:30pm	ASY 1314	Lab

ARTT333 **Elements of Sculpture: Wood and Mixed Media**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Sculptural concepts and fundamental processes using wood and mixed media.

Students must pay a $40.00 studio lab fee.

0101	Foon Sham	Seats (Total: 12)	
	TuTh 3:00pm - 5:30pm	ASY 1311	Lab

ARTT333H **Elements of Sculpture: Wood and Mixed Media**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Sculptural concepts and fundamental processes using wood and mixed media.

Restricted to departmental honors students only. Students must pay a $40.00 studio lab fee.

0101	Foon Sham	Seats (Total: 2)	
	TuTh 3:00pm - 5:30pm	ASY 1311	Lab

ARTT341 **Elements of Printmaking: Woodcut and Relief**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Concepts and fundamental processes related to woodcuts, linocuts, and other relief printing media.

Students must pay a $40.00 studio lab fee.

0101	Lauren Koch	Seats (Total: 10)	
	MW 9:00am - 11:30am	ASY 1317	Lab

ARTT341H **Elements of Printmaking: Woodcut and Relief**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Concepts and fundamental processes related to woodcuts, linocuts, and other relief printing media.

0101	Lauren Koch	Seats (Total: 2)	
	MW 9:00am - 11:30am	ASY 1317	Lab

ARTT343 **Elements of Printmaking: Screen Printing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Concepts and fundamental processes related to silkscreen printing.

Students must pay a $40.00 studio lab fee. Includes photographic processes.

0101	Matthew McLaughlin	Seats (Total: 12)	
	MW 12:30pm - 3:00pm	ASY 1317	Lab

ARTT343H **Elements of Printmaking: Screen Printing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Concepts and fundamental processes related to silkscreen printing.

Students must pay a $40.00 studio lab fee.

0101	Matthew McLaughlin	Seats (Total: 2)	
	MW 12:30pm - 3:00pm	ASY 1317	Lab

ARTT353 **Elements of Photography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Introduction to black-and-white photography. Basic technical and aesthetic vocabulary, camera mechanics and darkroom techniques. Introduction to the photographic message and meaning in both fine art and design concept.

Contact department for information to register for this course.

ARTT357 **Interactive Design**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ARTT355 and ARTT356.

In-depth exploration of interactive design and website construction. Emphasis on concept-driven and community-based projects using variety of interactive software programs.

Students must pay a $40.00 studio lab fee.

0101	Rieko Chacey	Seats (Total: 25)	
	TuTh 2:00pm - 4:30pm	ASY 2322	Lab

ARTT361 **Design Literacy: Decoding Our Visual Culture**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT355 and ARTT356. Credit only granted for: ARTT361 or ARTT489L. Formerly: ARTT489L.

Holistic presentation of design history and theory from pre-history to present. Covers primarily visual communication design and includes the interrelationship of interior-, furniture-, industrial-, fashion-design, and architecture.

0101	Rex Weil	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	ASY 2322

ARTT369T **Special Topics in Study Abroad III; Elements of Photography**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ARTT370 **Elements of Digital Media**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT150, ARTT200, ARTT210, and ARTT255; or permission of ARHU-Art department.

Exploration of image creation and manipulation, interactivity, and linkages between digital audio and video. Emphasis on issues in contemporary digital art.

Students must pay a $40.00 studio lab fee.

0101	Brandon Morse	Seats (Total: 14)
	TuTh 12:30pm - 3:00pm	ASY 3304

ARTT386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Prerequisite: Permission of ARHU-Art department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

ARTT389 **Department of Art Undergraduate Teaching Assistantship**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Individual contractual agreement with faculty/mentor. Individualized assistantship in the teaching of a specified department course offering. Must have previously received an "A" grade for the class to be assisting.

Contact department for information to register for this course.

ARTT399 **Department of Art Research Assistantship**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Individual contractual agreement with faculty/mentor. Individualized experiential learning developed in relation to art-related research issues.

Contact department for information to register for this course.

ARTT418B **Advanced Drawing Studio; Advanced Drawing: Contemporary Approach**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level drawing studio emphasizing advanced concepts and processes related to drawing; emphasis on contemporary art issues and individual directions.

Prerequisite: ARTT150, ARTT200 and ARTT210; plus one 300-level studio course; or permission of Department. Repeatable to 12 credits. Students must pay a $40.00 studio lab fee. Multi-level drawing studio emphasizing advanced concepts and processes related to drawing; emphasis on contemporary art issues and individual directions.

0101	Leslie Berns MW 3:30pm - 6:00pm	Seats (Total: 16) ASY 2314	Lab
0201	Jowita Wyszomirska TuTh 3:30pm - 6:00pm	Seats (Total: 16) ASY 2314	Lab
0301	Matthew McLaughlin MW 9:00am - 11:30am	Seats (Total: 16) ASY 2314	Lab

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ARTT418H **Advanced Drawing Studio; Honors Advanced Drawing**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Multi-level drawing studio emphasizing advanced concepts and processes related to drawing; emphasis on contemporary art issues and individual directions.

Restricted to departmental honors students only. Prerequisite: ARTT150, ARTT200, and ARTT210; plus one 300-level studio course; and permission of department. Students must pay a $40.00 studio lab fee.

0101	Leslie Berns MW 3:30pm - 6:00pm	Seats (Total: 2) ASY 2314	Lab
0201	Jowita Wyszomirska TuTh 3:30pm - 6:00pm	Seats (Total: 2) ASY 2314	Lab
0301	Matthew McLaughlin MW 9:00am - 11:30am	Seats (Total: 2) ASY 2314	Lab

ARTT428 **Advanced Painting Studio; Advanced Painting**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Multi-level painting studio emphasizing advanced concepts and processes related to oil and acrylic painting; emphasis on contemporary art issues and individual directions in chosen media.

Prerequisite: ARTT320 or permission of department. Repeatable to 12 credits. Students must pay a $40.00 studio lab fee. Multi-level painting studio emphasizing advanced concepts and processes related to oil and acrylic painting; emphasis on contemporary art issues and individual directions.

0101	Patrick Craig TuTh 3:00pm - 5:30pm *This section uses acrylic paint only.*	Seats (Total: 18) ASY 3312	Lab
0201	Leah Lewman MW 3:30pm - 6:00pm	Seats (Total: 18) ASY 3318	Lab
0301	Matthew Robertson MW 9:00am - 11:30am	Seats (Total: 8) ASY 3318	Lab

ARTT428H **Advanced Painting Studio; Honors Advanced Painting**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Multi-level painting studio emphasizing advanced concepts and processes related to oil and acrylic painting; emphasis on contemporary art issues and individual directions in chosen media.

Restricted to departmental honors students only. Prerequisite: ARTT320 and permission of department. Students must pay a $40.00 studio lab fee.

0101	Patrick Craig TuTh 3:00pm - 5:30pm *This section uses acrylic paint only.*	Seats (Total: 2) ASY 3312	Lab
0201	Leah Lewman MW 3:30pm - 6:00pm	Seats (Total: 2) ASY 3316	Lab
0301	Matthew Robertson MW 9:00am - 11:30am	Seats (Total: 2) ASY 3318	Lab

ARTT428X **Advanced Painting Studio**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level painting studio emphasizing advanced concepts and processes related to oil and acrylic painting; emphasis on contemporary art issues and individual directions in chosen media.

Contact department for information to register for this course.

ARTT438A **Advanced Sculpture Studio; Advanced Metal Casting**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level sculpture studio; continuation of media-specific sculpture courses with emphasis on contemporary art issues and individual directions in chosen media.

Prerequisite: ARTT330 or permission of department. Students must pay a $40.00 studio lab fee.

0101	John Ruppert MW 12:30pm - 3:00pm	Seats (Total: 4) ASY 1310	Lab

ARTT438D **Advanced Sculpture Studio; Advanced Sculpture in Wood and Mixed Media**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level sculpture studio; continuation of media-specific sculpture courses with emphasis on contemporary art issues and individual directions in chosen media.

Prerequisite: ARTT333 or permission of department. Repeatable to 12 credits. Students must pay a $40.00 studio lab fee. Multi-level sculpture studio; continuation of media-specific sculpture courses with emphasis on contemporary art issues and individual directions in chosen media.

0101	Foon Sham	Seats (Total: 3)	
	TuTh 3:00pm - 5:30pm	ASY 1311	Lab

ARTT438E **Advanced Sculpture Studio; Advanced Steel and Multi-Media Sculpture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level sculpture studio; continuation of media-specific sculpture courses with emphasis on contemporary art issues and individual directions in chosen media.

Students must pay a $40.00 studio lab fee.

0101	John Ruppert	Seats (Total: 4)	
	MW 3:00pm - 5:30pm	ASY 1314	Lab

ARTT438H **Advanced Sculpture Studio; Honors Advanced Sculpture**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level sculpture studio; continuation of media-specific sculpture courses with emphasis on contemporary art issues and individual directions in chosen media.

Restricted to departmental honors students only. Prerequisite: 300-level sculpture course and permission of department. Students must pay a $40.00 studio lab fee.

0101	Foon Sham	Seats (Total: 2)	
	TuTh 3:00pm - 5:30pm	ASY 1311	Lab
0201	John Ruppert	Seats (Total: 2)	
	MW 12:30pm - 3:00pm	ASY 1314	Lab
0301	John Ruppert	Seats (Total: 2)	
	MW 3:00pm - 5:30pm	ASY 1314	Lab

ARTT448E **Advanced Printmaking Studio; Advanced Screen Printing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level printmaking studio; continuation of media-specific printmaking courses with emphasis on contemporary art issues and individual directions in chosen media.

Prerequisite: ARTT343 or permission of department. Repeatable to 12 credits. Students must pay a $40.00 studio lab fee. Multi-level printmaking studio with emphasis on multi-media print processes and contemporary issues in print media.

0101	Justin Strom	Seats (Total: 12)	
	TuTh 3:30pm - 6:00pm	ASY 1317	Lab

ARTT448F **Advanced Printmaking Studio; Woodcut and Mixed Media**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level printmaking studio; continuation of media-specific printmaking courses with emphasis on contemporary art issues and individual directions in chosen media.

Prerequisite: One 300-level printmaking course or permission of department. Students must pay a $40.00 studio lab fee. Multi-level printmaking studio; continuation of media-specific printmaking courses with emphasis on contemporary art issues and individual directions in chosen media.

0101	Lauren Koch	Seats (Total: 2)	
	MW 9:00am - 11:30am	ASY 1317	Lab

ARTT448H **Advanced Printmaking Studio; Honors Advanced Printmaking**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Multi-level printmaking studio; continuation of media-specific printmaking courses with emphasis on contemporary art issues and individual directions in chosen media.

Restricted to departmental honors students only. Prerequisite: 300-level printmaking course and permission of department. Students must pay a $40.00 studio lab fee.

0101	Justin Strom	Seats (Total: 2)	
	TuTh 3:30pm - 6:00pm	ASY 1317	Lab
	Advanced multi-media printing.		

ARTT455 **Three Dimensional Graphic Design**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ARTT355, ARTT356, and ARTT357. Recommended: ARTT333. Credit only granted for: ARTT352 or ARTT455. Formerly: ARTT352.

Continued exploration of advanced graphic design practices with primary emphasis on 3-D object and packaging design. Includes research, course reading discussion, oral presentations, and specific project assignments which will require a proficient level of hand-skills (craft) and computer skills.

Students must pay a $40.00 studio lab fee.

0101	Anne Kerns	Seats (Total: 25)	
	MW 12:30pm - 3:00pm	ASY 2322	Lab

ARTT456 **Motion Design**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARTT355, ARTT356, and ARTT357; or permission of ARHU-Art department.

Explores computer graphics and visual communication principles in a time-based context. Examination of fundamental design principles through digital projects that involve photo manipulation, digital illustration, layout, animation, and web design.

Students must pay a $40.00 studio lab fee.

0101	Rieko Chacey	Seats (Total: 15)	
	TuTh 9:00am - 11:30am	ASY 2322	Lab

ARTT458 **Graphic Design Portfolio; Advanced Graphic Design**

(Perm req)

Credits: 3 Grading Method: Regular

Creation of a comprehensive professional portfolio. Curriculum includes portfolio preparation and presentation, contracts, copyright issues, interviewing skills, resume and cover-letter writing, design briefs and proposals, and freelance business issues. Portfolio presentation includes basics of book arts.

Students must pay a $40.00 studio lab fee. Print publication and self promotion design.

0101	Malcolm Jones	Seats (Total: 25)	
	MW 3:30pm - 6:00pm	ASY 2322	Lab

ARTT479D **Advanced Digital Media Studio; Immersive and Virtual Environments**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Variable multi-level studio emphasizing advanced concepts and processes related to time-based, projection, installation, interactive, and audio/visual integrated digital art. Emphasis on contemporary art issues and individual directions.

Prerequisite: ARTT370 or permission of Department. Introduction to the uses of game development software in an artistic context. Practical examination of interactive, immersive and installation art as mediated through the context of real-time computer generated imagery and game engine methodologies. Students must pay a $40.00 studio lab fee.

0101	Mollye Bendell	Seats (Total: 14)	
	TuTh 3:00pm - 5:30pm	ASY 3304	Lab

ARTT479E **Advanced Digital Media Studio; Art and Electronics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Variable multi-level studio emphasizing advanced concepts and processes related to time-based, projection, installation, interactive, and audio/visual integrated digital art. Emphasis on contemporary art issues and individual directions.

Prerequisite: ARTT370 or permission of Department. Studio course exploring the basics of building circuits with electronic components, motors, sensors, and Arduino technology in the context of interactive art and kinetic sculpture. Students must pay a $40.00 studio lab fee.

0101	Cy Keener	Seats (Total: 14)	
	MW 12:30pm - 3:00pm	ASY 3304	Lab

ARTT479H **Advanced Digital Media Studio; Honors Advanced Digital Media**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Variable multi-level studio emphasizing advanced concepts and processes related to time-based, projection, installation, interactive, and audio/visual integrated digital art. Emphasis on contemporary art issues and individual directions.

Prerequisite: ARTT370. Restricted to Departmental Honors students. Students must pay a $40.00 studio lab fee. Basics of sound recording, mixing, and processing, as well as creative applications of sound used for screen-based practices, performance and installation art. Theoretical concepts central to sound as an artistic medium are also introduced.

0101	Shannon Collis	Seats (Total: 2)	
	MW 4:00pm - 6:30pm	ASY 3304	Lab
0201	Brandon Morse	Seats (Total: 2)	
	TuTh 3:00pm - 5:30pm	ASY 3304	Lab

ARTT489N **Advanced Special Topics in Art; Design in Illustration**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced studio art and theory within the context of a special topic.

Pre-requisite: ARTT210. This course may not be used to satisfy the studio art elective requirement for the Graphic Design Concentration -Track 3. Students must pay a $40.00 studio lab fee.

0101	James Thorpe	Seats (Total: 20)
	TuTh 9:00am - 11:30am	ASY 2318

ARTT489P **Advanced Special Topics in Art; Experimental Film and Video**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced studio art and theory within the context of a special topic.

Contact department for information to register for this course.

ARTT489W **Advanced Special Topics in Art; Contemporary Issues in Art and Technology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced studio art and theory within the context of a special topic.

0101	Hasan Elahi	Seats (Total: 12)
	Tu 6:30pm - 9:00pm	ASY 3221

ARTT489X **Advanced Special Topics in Art; Watching You Watching Me: Surveillance in Art**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced studio art and theory within the context of a special topic.

Seminar course on contemporary photographic artists working with current issues of surveillance and counter-surveillance practices exploring issues of privacy, biometric tracking, machine vision, visibility, monitoring of social media, smartphone geolocation data, and other panoptic methods.

0101	Hasan Elahi	Seats (Total: 12)
	W 6:30pm - 9:00pm	ASY 3217

ARTT498A **Directed Studies in Studio Art**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Advanced independent work in Studio Art. Meeting with faculty and studi time arranged.

Students must pay a $40.00 studio lab fee.

Contact department for information to register for this course.

ARTT498B **Directed Studies in Studio Art**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Advanced independent work in Studio Art. Meeting with faculty and studi time arranged.

Students must pay a $40.00 studio lab fee.

Contact department for information to register for this course.

ARTT498H **Directed Studies in Studio Art; Honors Thesis**

(Perm req)

Credits: 2-3 Grading Method: Regular, Pass-Fail, Audit

Advanced independent work in Studio Art. Meeting with faculty and studi time arranged.

Restricted to departmental honors students only. Prerequisite: permission of department. Students must pay a $40.00 studio lab fee.

Contact department for information to register for this course.

ARTT618 **Drawing; Drawing**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent studies in drawing for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT628 **Painting; Painting**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Graduate painting for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT638 **Sculpture; Sculpture**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Independent studies in sculpture for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT648 **Printmaking; Printmaking**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Independent studies in printmaking for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT689W **Special Problems in Studio Art; Contemporary Issues in Art and Technology**

Credits: 3

Grading Method: Regular, Audit

0101	Hasan Elahi	Seats (Total: 4)
	Tu 6:30pm - 9:00pm	ASY 3221

ARTT689X **Special Problems in Studio Art; Watching You Watching Me: Surveillance in Art**

Credits: 3

Grading Method: Regular, Audit

Seminar course on contemporary photographic artists working with current issues of surveillance and counter-surveillance practices exploring issues of privacy, biometric tracking, machine vision, visibility, monitoring of social media, smartphone geolocation data, and other panoptic methods.

0101	Hasan Elahi	Seats (Total: 4)
	W 6:30pm - 9:00pm	ASY 3217

ARTT698A **Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4

Grading Method: Regular, Audit

Independent work. Meetings with faculty and studio time arranged.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT698B **Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Independent work. Meetings with faculty and studio time arranged.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT698C **Directed Graduate Studies in Studio Art; Graduate Teaching Practicum**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Independent work. Meetings with faculty and studio time arranged.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT699A **Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Independent graduate studies.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT699B **Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Independent graduate studies.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT718 **Drawing; Drawing**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent studies in drawing for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT728 **Painting; Painting**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent studies in painting for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT738 **Sculpture; Sculpture**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent studies in sculpture for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT748 **Printmaking; Printmaking**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent studies in printmaking for advanced special students.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT768 **Graduate Colloquium**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Examines various aspects of art, art theory and criticism in a contemporary and multi-cultural context. Relates student work to this context.

Students must pay a $60.00 studio lab fee.

0101	Justin Strom Tu 6:30pm - 9:00pm	Seats (Total: 18) Location: TBA

ARTT798A **Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Independent graduate studies.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT798B **Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Independent graduate studies.

Students must pay a $60.00 studio lab fee.

Contact department for information to register for this course.

ARTT799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ASTR Astronomy Spring 2019

ASTR100 **Introduction to Astronomy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS

Credit only granted for: ASTR100, ASTR101, or ASTR120.

An elementary course in descriptive astronomy, especially appropriate for non-science students. Topics include the Sun, Moon, planets, stars, and nebulae, galaxies, and evolution of the Universe.

Discussion sections do not meet the first week of classes. Attend lecture before coming to discussion section.

0101	Lee Mundy TuTh 9:30am - 10:45am M 10:00am - 10:50am	Seats (Total: 40) PHY 1412 ATL 2400	Discussion
0102	Lee Mundy TuTh 9:30am - 10:45am M 2:00pm - 2:50pm	Seats (Total: 40) PHY 1412 ATL 2400	Discussion

0103	Lee Mundy TuTh 9:30am - 10:45am M 3:00pm - 3:50pm	Seats (Total: 40) PHY 1412 ATL 2400	 Discussion
0104	Lee Mundy TuTh 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 40) PHY 1412 ATL 2400	 Discussion
0105	Lee Mundy TuTh 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 40) PHY 1412 ATL 2400	 Discussion
0106	Lee Mundy TuTh 9:30am - 10:45am F 1:00pm - 1:50pm	Seats (Total: 40) PHY 1412 ATL 2400	 Discussion

ASTR101 **General Astronomy**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: PL | General Education: DSNL

Credit only granted for: ASTR100, ASTR101, or ASTR120.

Descriptive astronomy, appropriate for non-science majors. Sun, moon, planets, stars, nebulae, galaxies and evolution. Laboratory exercises include use of photographic material, computer simulations, and standard laboratory equipment.

Discussion sections and lab do not meet the first week of classes. Attend lecture before coming to discussion or lab section. Students must pay a $50.00 Laboratory Materials fee.

0101	Stuart Vogel TuTh 11:00am - 12:15pm Tu 5:30pm - 7:30pm Tu 3:30pm - 4:20pm	Seats (Total: 20) PHY 1412 ATL 0254 ATL 2400	 Lab Discussion
0102	Stuart Vogel TuTh 11:00am - 12:15pm W 8:30am - 10:30am Tu 3:30pm - 4:20pm	Seats (Total: 20) PHY 1412 ATL 0254 ATL 2400	 Lab Discussion
0103	Stuart Vogel TuTh 11:00am - 12:15pm W 11:00am - 1:00pm W 10:00am - 10:50am	Seats (Total: 20) PHY 1412 ATL 0254 ATL 2400	 Lab Discussion

0104	Stuart Vogel	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm Th 8:30am - 10:30am W 10:00am - 10:50am	PHY 1412 ATL 0254 ATL 2400	 Lab Discussion
0105	Stuart Vogel	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm W 6:00pm - 8:00pm W 11:00am - 11:50am	PHY 1412 ATL 0254 ATL 2400	 Lab Discussion
0106	Stuart Vogel	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm F 1:00pm - 3:00pm W 11:00am - 11:50am	PHY 1412 ATL 0254 ATL 2400	 Lab Discussion
0107	Stuart Vogel	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm W 1:00pm - 3:00pm W 12:00pm - 12:50pm	PHY 1412 ATL 0254 ATL 2400	 Lab Discussion
0108	Stuart Vogel	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm F 9:00am - 11:00am W 12:00pm - 12:50pm	PHY 1412 ATL 0254 ATL 2400	 Lab Discussion
0109	Stuart Vogel	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm Th 6:00pm - 8:00pm W 2:00pm - 2:50pm	PHY 1412 ATL 0254 ATL 2400	 Lab Discussion
0110	Stuart Vogel	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm Th 3:30pm - 5:30pm W 2:00pm - 2:50pm	PHY 1412 ATL 0254 ATL 2400	 Lab Discussion

ASTR121 **Introductory Astrophysics II - Stars and Beyond**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: PL | General Education: DSNL

Prerequisite: ASTR120 and MATH140; or permission of CMNS-Astronomy department.

For students majoring in astronomy or with a strong interest in science Includes instrumentation, stellar properties, stellar evolution, structure of the galaxy, other galaxies, large scale structure, Big Bang Theory, and future of the universe.

0101	Michael Miller	Seats (Total: 15)	
	TuTh 11:00am - 12:15pm M 2:00pm - 4:00pm F 1:00pm - 1:50pm	ATL 2428 ATL 0224 ATL 2428	 Lab Discussion
0102	Michael Miller	Seats (Total: 15)	
	TuTh 11:00am - 12:15pm M 11:00am - 1:00pm F 2:00pm - 2:50pm	ATL 2428 ATL 0224 ATL 2352	 Lab Discussion

ASTR220 **Collisions in Space - The Threat of Asteroid Impacts**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: PS	General Education: DSNS, SCIS

Restriction: Must not be in Astronomy program. Additional information: Course is open to Astronomy and Planetary Sciences minors.

Appropriate for non-science majors. Worried? Can't sleep? Collisions in Space will evaluate the threat of asteroid impacts with the Earth using knowledge of asteroid characteristics and orbits. The merits of possible defense plans will be discussed, as well as the budgetary and political concerns associated with implementing any such plan.

0101	Derek Richardson	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm W 1:00pm - 1:50pm	ESJ 2309 ATL 1114	 Discussion
0102	Derek Richardson	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm W 2:00pm - 2:50pm	ESJ 2309 ATL 1114	 Discussion

ASTR230 **The Science and Fiction of Planetary Systems**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: PS	General Education: DSNS, SCIS

Prerequisite: Must have math eligibility of MATH115 or higher; or MATH113.

Have you ever wondered if humans will ever terraform Mars or Europa so we could live there without a spacesuit? Has it ever crossed your mind how lucky you are that you live on a water-rich planet with an oxygen-rich atmosphere? Have you ever suspected novelists and scriptwriters of creating ridiculous planets that violate scientific laws? Does the fate of our planet's thin biosphere keep you up at night? How common is life in the Universe? These are difficult questions, but armed with the right information, you can answer all of them. The Science and Fiction of Planetary Systems will help you develop a deeper understanding of why planets are the way they are. Along the way, you'll see examples of mistakes made in classic science fiction movies, novels and short stories and get the chance to invent your own plausible planets!

0101	Alan Peel W 9:00am - 9:50am MWF 11:00am - 11:50am	Seats (Total: 42) PHY 1412 ESJ 2309	 Discussion
0102	Alan Peel W 9:00am - 9:50am MWF 12:00pm - 12:50pm	Seats (Total: 42) PHY 1412 ESJ 2309	 Discussion

ASTR288 **Special Projects in Astronomy**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Independent study, short research projects, tutorial reading, and assisting with faculty research and teaching under special supervision.

A faculty sponsor must be found by the students prior to enrollment.

Contact department for information to register for this course.

ASTR288A **Special Projects in Astronomy; Practical Astrostatistics**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Independent study, short research projects, tutorial reading, and assisting with faculty research and teaching under special supervision.

Prerequisite: ASTR120, MATH140, and must be an Astronomy major. An introduction to statistics concepts and techniques useful in astronomy.

0101	Michael Miller M 4:00pm - 4:50pm	Seats (Total: 20) ATL 1114	

ASTR288I **Special Projects in Astronomy; Introduction to the Astronomy Major**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Independent study, short research projects, tutorial reading, and assisting with faculty research and teaching under special supervision.

Restriction: Permission of CMNS-Astronomy department. Introduces new Astronomy majors to the possible career paths that they might choose upon completion of an undergraduate Astronomy degree, soft skills that would be useful in these possible careers, and useful skills and knowledge to better prepare them for research as an undergraduate.

0101	Elizabeth Tarantino	Seats (Total: 15)
	M 4:00pm - 4:50pm	ATL 1106

ASTR300 **Stars and Stellar Systems**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSNS

Prerequisite: ASTR100 or ASTR101; and completion of the CORE Distributive Studies requirement in Mathematics and Sciences or General Education Fundamental Studies requirement in Mathematics. Or permission of CMNS-Astronomy department.

Designed primarily for non-science majors. Study of stars-types, properties, evolution, and distribution in space; supernovae, pulsars, and black holes.

0101	A Sharma	Seats (Total: 60)
	TuTh 9:30am - 10:45am	ESJ 2309

ASTR315 **Astronomy in Practice**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

General Education: DSNL, DSSP

Restriction: Must not be in Astronomy program. Additional information: Appropriate for non-science majors.

Students learn astronomy research techniques and contribute significantly to the existing body of astronomical knowledge. Students apply methods and tools such as celestial coordinates, telescopes and CCD cameras, and appropriate analysis software to a specific observational goal. Students produce a work detailing their scientific result which will be submitted for publication in a professional venue. Each semester, the course focuses on a specific astronomical topic or type of object, such as asteroids, extrasolar planets, supernovae in other galaxies, quasars, etc.

0101	Melissa Hayes-Gehrke	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	ESJ 2309	
	M 9:00am - 10:50am	ATL 0224	Lab

0102	Melissa Hayes-Gehrke	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm F 11:00am - 12:50pm	ESJ 2309 ATL 0224	Lab

ASTR320 **Theoretical Astrophysics**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: ASTR121; and (PHYS270 and PHYS271; or PHYS273). Or permission of CMNS-Astronomy department.

Application of selected physics concepts in an astrophysical context. Topics would include gravity (Keplerian motion, Virial theorem, Roche limit, dynamical friction); gas dynamics (hydrostatic equilibrium, stellar models, spiral density waves), thermodynamics and statistical physics (Boltzmann distribution, Wien displacement, convective instability, degenerate gas); atomic physics (quantum principles, H atom, permitted and forbidden lines); radiation processes (line radiation, opacity).

0101	Massimo Ricotti	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm W 1:00pm - 1:50pm	ATL 1114 ATL 2428	Discussion

ASTR330 **Solar System Astronomy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNS

Prerequisite: ASTR100 or ASTR101; and completion of the CORE Distributive Studies requirement in Mathematics and Sciences or the General Education Fundamental Studies requirement in Mathematics. Or permission of CMNS-Astronomy department. Credit only granted for: ASTR330 or GEOL212.

Designed primarily for non-science majors. The structure of planets and of their atmospheres, the nature of comets, asteroids, and satellites. Comparison of various theories for the origin of the solar system. Emphasis on a description of recent data and interpretation.

0101	Timothy Livengood	Seats (Total: 60)	
	TuTh 11:00am - 12:15pm	ATL 2400	

ASTR380 **Life in the Universe - Astrobiology**

Credits: 3 Grading Method: Regular, Audit General Education: DSNS

Designed primarily for non-science majors. Study of the astronomical perspective on the conditions for the origin and existence of life in the universe.

0101	Michael Corcoran, Kenji Hamaguchi TuTh 2:00pm - 3:15pm	Seats (Total: 60) ATL 2400

ASTR399 **Honors Seminar**

(Perm req)

Credits: 1-16 Grading Method: Regular, Pass-Fail, Audit

Credit according to work done.

Contact department for information to register for this course.

ASTR422 **Cosmology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in ASTR320; or permission of CMNS-Astronomy department.

Introduction to modern cosmology. Topics include large scale structure of universe, the intergalactic medium, the nature of dark matter cosmological models and galaxy formation.

0101	Alan Peel TuF 3:30pm - 4:45pm	Seats (Total: 30) ATL 2330

ASTR435 **Astrophysics of Exoplanets**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ASTR121; and (PHYS273; or (PHYS270 and PHYS271)). Or permission of CMNS-Astronomy department. Credit only granted for: ASTR 498X or ASTR 435. Formerly: ASTR 498X.

Introduction to exoplanets. Topics include historical development, advantages, and limitations of detection methods, the statistics of exoplanet characteristics, the bulk properties of known expolanets, and remote sensing for characterization of exoplanets.

0101	Eliza Kempton WF 2:00pm - 3:15pm	Seats (Total: 30) ATL 2428

ASTR498 **Special Problems in Astronomy**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Research or special study. Credit according to work done.

Contact department for information to register for this course.

ASTR670 **Interstellar Medium and Gas Dynamics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ASTR601; or permission of CMNS-Astronomy department.

Content of phases of the interstellar medium: physical processes in the ISM: ionization equilibrium, heating and cooling, interstellar dust; gas dynamics: fluid motions, instabilities, shock waves; magnetohydrodynamics.

0101	Alberto Bolatto TuTh 12:30pm - 1:45pm	Seats (Total: 20) ATL 0201

ASTR680 **High Energy Astrophysics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of CMNS-Astronomy department. Formerly: ASTR688M.

The structure, formation, and astrophysics of compact objects, such as white dwarfs, neutron stars, and black holes, are examined.

0101	Richard Mushotzky TuTh 2:00pm - 3:15pm	Seats (Total: 30) ATL 2330

ASTR688C **Special Topics in Modern Astronomy; Seminar in Modern Astronomy Research**

(Perm req)

Credits: 1 Grading Method: Regular

Special topics such as extragalactic radio sources, plasma astrophysics, the H.R. diagram, chemistry of the interstellar medium, radiophysics of the sun.

0101	Michael Miller W 3:30pm - 5:30pm	Seats (Total: 30) ATL 2400

ASTR699 **Special Problems in Advanced Astronomy**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ASTR799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ASTR898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ASTR899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

BCHM Biochemistry Spring 2019

The College of Computer, Mathematical and Natural Sciences enforces course prerequisites. Students who do not meet the course prerequisites will be administratively dropped from the course. Registration in course sections which begin with "SES" is restricted to students admitted into the Science in the Evening Program, administered through the Office of Extended Studies. For complete information, visit: http://oes.umd.edu/index.php?slab=sie , e-mail oes@umd.edu, or call 301-405-7762.*

BCHM461 **Biochemistry I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM271 and CHEM272; or minimum grade of C- in CHEM276 and CHEM277. Credit only granted for: BCHM461 or BCHM463.

First semester of a comprehensive introduction to modern biochemistry. Structure, chemical properties, and function of proteins and enzymes, carbohydrates, lipids, and nucleic acids. Basic enzyme kinetics and catalytic mechanisms.

0101	Paul Paukstelis TuTh 9:30am - 10:45am	Seats (Total: 130) CHM 1407
0102	Christopher Capp TuTh 12:30pm - 1:45pm	Seats (Total: 130) CHM 1402

BCHM462 **Biochemistry II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BCHM461. Credit only granted for: BCHM462 or BCHM463.

A continuation of BCHM 461. Metabolic pathways and metabolic regulation energy transduction in biological systems, enzyme catalytic mechanisms.

0101	Douglas Julin TuTh 2:00pm - 3:15pm	Seats (Total: 75) CHM 1402
0102	Myles Poulin MWF 1:00pm - 1:50pm	Seats (Total: 75) CHM 1402

BCHM463 **Biochemistry of Physiology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in CHEM271 and CHEM272; or minimum grade of C- in CHEM276 and CHEM277. Credit only granted for: BCHM461, BCHM462 or BCHM463.

A one-semester introduction to general biochemistry. A study of protein structure, enzyme catalysis, metabolism, and metabolic regulation with respect to their relationship to physiology.

0101	Bonnie Dixon MWF 2:00pm - 2:50pm	Seats (Total: 130) CHM 1402
0201	Christiana Guest TuTh 2:00pm - 3:15pm	Seats (Total: 130) PHY 1410
SES1	Bonnie Dixon M 6:30pm - 9:30pm	Seats (Total: 45) CHM 2201
	Restricted to students in the SIE Program. Click here for more information.	

BCHM464 **Biochemistry Laboratory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BCHM461 or BCHM463; and a grade of C- or better in the prerequisite is required for all College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: BCHM465. Restriction: BCHM, CHEM, and Nutritional Sciences majors have first priority, followed by other life science majors.

Biochemical and genetic methods for studying protein function. Site-directed mutagenesis and molecular cloning, protein purification, enzyme activity assays, computer modeling of protein structure.

Students must pay a $40.00 lab materials fee.

0101	Christopher Capp Th 11:00am - 11:50am M 1:00pm - 5:50pm	Seats (Total: 18) CHM 1402 ESJ 0316	 Lab
0102	Christopher Capp Th 11:00am - 11:50am Tu 12:30pm - 5:20pm	Seats (Total: 18) CHM 1402 ESJ 0316	 Lab
0103	Christopher Capp Th 11:00am - 11:50am W 1:00pm - 5:50pm	Seats (Total: 18) CHM 1402 ESJ 0316	 Lab

BCHM465 **Biochemistry III**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: CS

Prerequisite: BCHM461 or BCHM463; and a grade of C- or better in the prerequisite is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Recommended: BCHM462.

CORE Capstone (CS) Course. An advanced course in biochemistry. Biochemical approach to cellular information processing. DNA and RNA structure. DNA replication, transcription, and repair. Translation of mRNA to make proteins.

0101	Theodore Dayie MWF 12:00pm - 12:50pm	Seats (Total: 80) CHM 1402

BCHM485 **Physical Biochemistry**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM481. Restriction: Must be in Biochemistry program; or permission of instructor. Credit only granted for: CHEM482 or BCHM485.

Physical Chemistry with applications to biological systems. Principal topics: quantum chemistry, spectroscopy, structural methods for biological macromolecules, statistical thermodynamics, transport processes in liquid phase, chemical and biochemical kinetics, modeling and simulation, polymer dynamics.

0101	David Fushman TuTh 9:30am - 10:45am	Seats (Total: 55) CHM 2201

BCHM669L **Special Topics in Biochemistry; Introduction to Structure Determination I: X-ray Crystallography and Complimentary Approaches**

Credits: 3 Grading Method: Regular, Audit

0101	Nicole LaRonde	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	PLS 5112

BCHM675 **Biophysical Chemistry**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CHEM481 and BCHM461; or students who have taken courses with comparable content may contact the department.

Conformation, shape, structure, conformational changes, dynamics and interactions of biological macromolecules and complexes or arrays of macromolecules. Physical techniques for studying properties of biological macromolecules.

0101	Dorothy Beckett	Seats (Total: 25)
	TuTh 9:30am - 10:45am	CHM 0124

BCHM676 **Biological Mass Spectrometry**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: BCHM461 or BCHM463. Formerly: BCHM669B.

Fundamentals of modern mass spectrometry and use with biochemical techniques to provide unique analyses of drug metabolites, lipids, carbohydrates, nucleotides and proteins. The interface with bioinformatics will be examined, which provides the foundation of proteomics.

0101	Peter Nemes	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	CHM 0124

BCHM698 **Literature Seminar in Biochemistry**

Credits: 2 Grading Method: Regular

Students will prepare and present a departmental seminar based on a topic in the current biochemical research literature.

0101	Paul Paukstelis	Seats (Total: 10)
	Contact instructor or department for details.	

BCHM699 **Special Problems in Biochemistry**

Credits: 1-6 Grading Method: Regular, Audit

Laboratory experience in a research environment. Restricted to students in the non-thesis M.S. option.

Open only to non-thesis M.S. degree candidates.

Contact department for information to register for this course.

BCHM799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

BCHM889A **Seminar; Biochemistry**

Credits: 1 Grading Method: Regular, Audit

0101	Peter Nemes Tu 11:00am - 11:50am	Seats (Total: 35) CHM 0112

BCHM889B **Seminar**

Credits: 1-3 Grading Method: Regular, Audit

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)

BCHM889D **Seminar; Enzymology of Recombination**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

BCHM889F **Seminar; Bacterial Spores**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

BCHM889G **Seminar; Biological Mass Spectrometry**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

BCHM889M **Seminar; Modern Methods in NMR and Structural Biology**

Credits: 1 Grading Method: Regular, Audit

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)

BCHM898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

BCHM899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

BIOE Bioengineering Spring 2019

BIOE120 **Biology for Engineers**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in MATH140. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Introduction to the functions and interactions of biological systems from a quantitative perspective. Introduction to the modern experimental techniques and methods of data analysis. Roles for bioengineers in biology, and the role of biology in bioengineering will be elucidated.

0101	Ganesh Sriram TuTh 2:00pm - 3:15pm Tu 5:00pm - 5:50pm	Seats (Total: 30) ESJ 0215 ESJ 1215	 Discussion

0102	Ganesh Sriram TuTh 2:00pm - 3:15pm Th 5:00pm - 5:50pm	Seats (Total: 30) ESJ 0215 ESJ 1215	Discussion
0201	Angela Jones MWF 3:00pm - 3:50pm F 2:00pm - 2:50pm	Seats (Total: 30) ESJ 0215 ESJ 0215	Discussion
0202	Angela Jones MWF 3:00pm - 3:50pm F 4:00pm - 4:50pm	Seats (Total: 30) ESJ 0215 ESJ 0215	Discussion
0301	Birthe Kjellerup TuTh 11:00am - 12:15pm W 11:00am - 11:50am	Seats (Total: 30) ESJ 1215 AJC 2121	Discussion
0302	Birthe Kjellerup TuTh 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 30) ESJ 1215 AJC 2119	Discussion

BIOE121 **Biology for Engineers Laboratory**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in BIOE120. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Bioengineering encompasses numerous sub-disciplines that apply engineering principles to analyze biological systems and that utilize engineering design strategies to solve biological and biomedical problems. This course is aimed at providing students with the opportunity to learn how biology and engineering can synergistically contribute to our understanding of such problems, and to gain hands-on experience in basic techniques relevant to Bioengineering.

0101	Angela Jones M 12:00pm - 12:50pm Tu 10:00am - 12:00pm	Seats (Total: 20) ESJ 2208 AJC 1121	Lab
0102	Angela Jones M 12:00pm - 12:50pm Tu 3:30pm - 5:30pm	Seats (Total: 20) ESJ 2208 AJC 1121	Lab

0103	Angela Jones M 12:00pm - 12:50pm Th 10:00am - 12:00pm	Seats (Total: 20) ESJ 2208 AJC 1121	 Lab
0104	Angela Jones M 12:00pm - 12:50pm Th 2:00pm - 4:00pm	Seats (Total: 20) ESJ 2208 AJC 1121	 Lab

BIOE221 **Academic and Career Planning**

(Perm req)

Credits: 1 Grading Method: Regular

Prerequisite: BIOE120 and BIOE121. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Provides practical tools to help Bioengineering majors think critically about their goals and career paths. Guides Bioengineering students through accessing useful resources both on- and off-campus.

0101	Abby Shantzis Tu 4:00pm - 4:50pm	Seats (Total: 30) AJC 2134	
0201	Bill Churma Tu 4:00pm - 4:50pm	Seats (Total: 30) AJC 2119	

BIOE232 **Bioengineering Thermodynamics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS261 and PHYS260. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE232, ENES232, ENME232, or ENME320.

A quantitative introduction to thermodynamic analysis of bioengineering systems. Bioengineering encompasses a wide range of applications from nanoscale interactions (e.g. reactions between molecules), to cellular interactions (e.g. membrane electrical currents), to overall balances on organisms, all the way to large scale manufacturing. Each of these applications (and many others not mentioned) involve energy interactions which is the domain of thermodynamics. The basic laws of thermodynamics will be introduced and explained through a series of examples related to bioengineering systems.

0101	Silvina Matysiak TuTh 12:30pm - 1:45pm M 1:00pm - 1:50pm	Seats (Total: 33) EGR 1108 AJC 2132	 Discussion

0102	Silvina Matysiak TuTh 12:30pm - 1:45pm W 1:00pm - 1:50pm	Seats (Total: 33) EGR 1108 AJC 2132	 Discussion

BIOE241 **Biocomputational Methods**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Application of computer technology to biological and natural resource systems considering engineering aspects. Designed to help students in the use of computer technology for problem solving. The course will cover 4-5 software packages important for later use by the student.

0201	Lan Ma MWF 10:00am - 10:50am	Seats (Total: 37) KEB 2111	
0301	Lan Ma MWF 3:00pm - 3:50pm	Seats (Total: 30) KEB 2111	

BIOE331 **Biofluids**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: MATH246, BIOE120, BIOE121, and BIOE241; and must have completed or be concurrently enrolled in BIOE232. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE331, ENCE305, or ENME331.

Principles and applications of fluid mechanics with a focus on bioengineering topics. Content includes conservation of mass, momentum, and energy, as well as the application of these fundamental relations to hydrostatics, control volume analysis, internal and external flow, and boundary layers. Applications to biological and bioengineering problems such as tissue engineering, bioprocessing, imaging, and drug delivery.

0101	Keith Herold TuTh 2:00pm - 3:15pm F 1:00pm - 2:50pm	Seats (Total: 30) CHE 2108 AJC 2121	 Discussion
0102	Keith Herold TuTh 2:00pm - 3:15pm F 3:00pm - 4:50pm	Seats (Total: 30) CHE 2108 AJC 2121	 Discussion

BIOE332 **Transport Process Design**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH246, BIOE120, BIOE121, and BIOE241; and must have completed or be concurrently enrolled in BIOE331 or ENME331. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Fluid flow, heat transfer, and mass transfer with applications in medicine, environment, biotechnology, food, agriculture, and other biosystems. Design of solutions to current problems in biological engineering is emphasized.

0101	Katharina Maisel	Seats (Total: 40)	
	TuTh 9:30am - 10:45am	AJC 2132	
	W 8:00am - 8:50am	AJC 2132	Discussion

BIOE340 **Modeling Physiological Systems and Lab**

(Perm req)

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI330, BIOE120, BIOE121, BIOE241, and MATH246. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE340 or (BSCI440 and BSCI441).

Topics covered will include cell and general physiology, membrane physiology, blood cells and clotting, circulation, metabolism, respiration, and the nervous system. A lab component will also be included.

0101	Steven Jay	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm	CSI 2117	
	Th 5:00pm - 6:30pm	KEB 2111	Lab
	W 4:00pm - 4:50pm	KEB 1200	Discussion
0102	Steven Jay	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm	CSI 2117	
	Th 5:00pm - 6:30pm	KEB 2107	Lab
	W 4:00pm - 4:50pm	KEB 1200	Discussion

BIOE371 **Linear Systems and Ordinary Differential Equations for Bioengineering Applications**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in MATH246. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

This class utilizes fundamentals in linear systems, including eigenvalues and eigenvectors, as well as linear differential equations, to study various problems in bioengineering and biological systems, with a particular emphasis on feedback, stability, controllability, and control design.

0101	Jose Aranda-Espinoza MWF 9:00am - 9:50am	Seats (Total: 70) CHE 2108	

BIOE372 **Biostatistics for Experimental Design and Data Analysis**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: BIOE120, BIOE121, and BIOE241. Recommended: MATH246. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE372 or STAT464.

This course will instruct students in the fundamentals of probability and statistics through examples in biological phenomenon, the design of bioengineering experiments, and clinical data analysis. Fundamentals covered in the course include probability distributions, hypothesis testing, power analysis, regression analysis, and correlation analysis.

0101	Angela Jones MWF 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 23) AJC 2132 AJC 2121	 Discussion
0102	Angela Jones MWF 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 23) AJC 2132 AJC 2121	 Discussion

BIOE389C **Special Projects in Bioengineering; Bioengineering Design Competitions**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail

Exploring a variety of projects in Bioengineering.

BIOE389 cannot be used as a technical elective towards the BIOE curriculum requirements.

0101	Steven Jay Th 7:00pm - 9:00pm	Seats (Total: 20) KEB 1200	

BIOE389F **Special Projects in Bioengineering; iGEM Research Seminar**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of projects in Bioengineering.

Also offered as BSCI338F. Credit granted for BSCI338F or BIOE389F. This course is open to iGEM team members to develop a synthetic biology research project for the internatial Genetically Engineered Machines competition.

0101	Edward Eisenstein, Jason Kahn	Seats (Total: 30)
	Th 3:00pm - 4:50pm	ESJ 2212

BIOE399 **Independent Study in Bioengineering**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Independent study.

Prerequisite: permission of department.

Contact department for information to register for this course.

BIOE399H **Independent Study in Bioengineering**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Independent study.

Contact department for information to register for this course.

BIOE411 **Tissue Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed at least one biology course; and (BIOE120, BIOE121, BIOE241, MATH246, and MATH241). Or permission of ENGR-Fischell Department of Bioengineering department. Recommended: BSCI330 and BIOE340. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Also offered as: CHBE487. Credit only granted for: BIOE411 or CHBE487.

A review of the fundamental principles involved in the design of engineered tissues and organs. Both biological and engineering fundamentals will be considered.

0101	John Fisher	Seats (Total: 24)
	W 1:00pm - 3:30pm	ATL 2316

BIOE420 **Bioimaging**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH246, BIOE120, BIOE121, and BIOE241. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Examines the physical principles behind major biomedical imaging modalities and new ways of using images for bio-related applications.

0101	Yu Chen	Seats (Total: 60)
	TuTh 3:30pm - 4:45pm	SPH 1303

BIOE431 **Fundamentals of Biosensor Techniques, Instrumentation, and Applications**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM135, PHYS260, PHYS261, BSCI330, BIOE120, BIOE121, BIOE241, and MATH246; or permission of ENGR-Fischell Department of Bioengineering department. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

A thorough review of fundamental concepts of biosensing systems, principles of common detection methods, and modern applications of biosensors. Primarily literature driven. Students will obtain a detailed understanding of cutting-edge biosensing techniques, the instrumentation used, and the application space. Students also will develop skills in using current literature as a source of knowledge.

0101	Ian White	Seats (Total: 35)
	MW 11:00am - 12:15pm	AJC 2119

BIOE437 **Computer-Aided Design in Bioengineering**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: BIOE120, BIOE121, BIOE241, and MATH246; or permission of ENGR-Fischell Department of Bioengineering department. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE437, BIOE689V, ENME414, ENME272, or ENAE488D. Formerly: BIOE689V.

Introduction to Computer-Aided Design (CAD). Basic CAD operations will be demonstrated in class with Creo Parametric (formerly Pro/E). Lecture topics will summarize design methodology, review best-practices in hardware development, and discuss engineering applications. The course will culminate in a student-selected project leveraging CAD.

0101	Milton Davis	Seats (Total: 35)
	Tu 5:00pm - 8:00pm	KEB 2111

BIOE453 **Biomaterials**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM231, MATH246, CHEM232, BIOE120, BIOE121, and BIOE241. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE453, CHBE457, or ENMA425.

Examination of the structure and function of natural biomaterials, and cell-extracellular matrix interactions. Study physical properties of synthetic biomaterials for biomedical applications. Understanding molecular level interactions between biomolecules and biomaterials to design novel biomaterials with desirable characteristics. Application of biomaterials as implants, drug delivery systems, biosensors, engineered materials such as artificial skin and bone growth scaffolds will be covered.

0101	Xiaoming He MWF 12:00pm - 12:50pm M 11:00am - 11:50am	Seats (Total: 30) CCC 1100 AJC 2121	 Discussion
0102	Xiaoming He MWF 12:00pm - 12:50pm M 1:00pm - 1:50pm	Seats (Total: 30) CCC 1100 AJC 2121	 Discussion

BIOE457 **Biomedical Electronics & Instrumentation**

(Perm req)

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BIOE120, BIOE121, BIOE241, PHYS261, MATH246, and PHYS260. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Students learn fundamental concepts of electronics, assembly of electronic components into functional circuits, and integration of functional electronic devices and circuits into a system. In the lab component, students will learn to assemble and evaluate circuits and systems.

0101	Ian White MWF 2:00pm - 2:50pm W 3:30pm - 5:30pm	Seats (Total: 30) TWS 0310 AJC 1121	 Lab
0102	Ian White MWF 2:00pm - 2:50pm F 10:00am - 11:50am	Seats (Total: 30) TWS 0310 AJC 1121	 Lab

BIOE461 **Synthetic Biology and Biological Engineering**

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: BIOE120, BIOE121, BIOE241, and MATH246; or permission of ENGR-Fischell Department of Bioengineering department. Recommended: Completion of BSCI222 and/or BSCI330 recommended. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE489G or BIOE 461. Formerly: BIOE489G.

Students are introduce to the scientific foundation and concepts of synthetic biology and biological engineering. Current examples that apply synthetic biology to fundamental and practical challenges will be emphasized. The course will also address the societal issues of synthetic biology, and briefly examine interests to regulate research in this area.

0101	Edward Eisenstein	Seats (Total: 60)
	TuTh 12:30pm - 1:45pm	ESJ 1215

BIOE463 **Spatial Control of Biological Agents**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BIOE120, BIOE121, BIOE241, and MATH246; and must have completed or be concurrently enrolled in BIOE332. Or permission of ENGR-Fischell Department of Bioengineering department. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Description and solution of the movement of passive and active biological agents in homogeneous and heterogeneous bioenvironments using partial differential equations and numerical methods. Identification and diagnosis of hot spots. Prescription of control strategies using techniques from Artificial Intelligence (AI) and verification of effectiveness. Applications environments may include landscapes and tissues.

0101	Hubert Montas	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	CHE 2116

BIOE486 **Capstone Design II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: CS

Prerequisite: Must have completed BIOE485 in the immediately preceding semester. Restriction: Senior standing; and must be in Engineering: Bioengineering program; and permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE486 or ENBE486. Formerly: ENBE486.

This is the second part of the senior capstone design course. This part is independent instruction where faculty mentoring each project team works with students to order supplies, fabricate their proposed design under BIOE485, test the design, write the report and present it to their fellow seniors and board of faculty mentors. Students are taught to convert the blue print of a design to actual device and test it.

0101	Lan Ma	Seats (Total: 120)	
	M 5:30pm - 8:00pm	ESJ 1202	
	M 4:00pm - 4:50pm	ESJ 1202	Lab

BIOE489E **Special Topics in Bioengineering; Entrepreneurship in Chemical and Life Sciences**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Also offered as CHEM498E and ENES498E. Credit granted for BIOE489E or ENES498E or CHEM498E.

0101	Ben Woodard	Seats (Total: 30)
	Th 2:00pm - 4:45pm	HBK 0115

BIOE489F **Special Topics in Bioengineering; CFD/FEA Applications in Bioengineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prerequisites: BIOE120, BIOE121, MATH241, BIOE241; recommended: BIOE489C.Covers Computational Fluid Dynamics (CFD) and Finite Element Analysis (FEA) as applicable to Bioengineering.

0101	Frank Modica	Seats (Total: 20)
	W 6:00pm - 9:00pm	KEB 2107

BIOE489H **Special Topics in Bioengineering; BIOE Honors Seminar**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

0101	Kimberly Stroka	Seats (Total: 40)
	Contact instructor or department for details.	

BIOE489I **Special Topics in Bioengineering; Optical Microscopy**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prereqs: BIOE120, BIOE121, BIOE241, MATH246. Co-requisite: BIOE371. Optical Microscopy includes a large variety of techniques central in many fields of biological and engineering research as well as clinical medicine. This course will provide a comprehensive overview of the fundamentals of optical microscopy. At a fundamental level, we will understand the interaction of light with tissue, cells and biomaterials and we willlearn the mathematical foundations to describe optical systems.

0101	Giuliano Scarcelli	Seats (Total: 30)
	TuTh 8:00am - 9:15am	AJC 2132

BIOE489T **Special Topics in Bioengineering; Biopharmaceutical Process Development and Manufacturing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prerequisite: BIOE120.

0101	Deborah Goldberg	Seats (Total: 10)
	MW 12:30pm - 1:45pm	AJC 2119

BIOE489V **Special Topics in Bioengineering; Cardiovascular Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prerequisites: BIOE120, BIOE241, MATH246, BIOE331, BIOE340 An overview of engineering applications in the cardiovascular system. Covers cardiovascular anatomy, physiology and pathophysiology in the context of cell and tissue mechanics, fluid mechanics, thermodynamics, biotransport, neurovascular coupling, and imaging. Includes design of cardiovascular devices, sensors, biomaterials, and tissue engineered constructs.

0101	Alisa Clyne	Seats (Total: 15)
	Tu 12:30pm - 3:00pm	AJC 2134

BIOE489Z **Special Topics in Bioengineering; Macro-scale Biomechanics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prereqs: BIOE120, BIOE121, BIOE241, MATH246, ENES102.

0101	Li-Qun Zhang	Seats (Total: 35)	
	TuTh 12:30pm - 1:45pm	AJC 2132	

BIOE606 **BIOE Graduate Studies II**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Restriction: Must be in ENGR: PhD Only-Bioengineering (Doctoral) program.

Second semester continued acclimation to the bioengineering graduate program. Students gain exposure to departmental research through lab rotation and to current research in the field through seminar.

0101	Jose Aranda-Espinoza	Seats (Total: 20)	
	F 10:00am - 10:50am	AJC 2121	
	F 9:00am - 9:50am	AJC 2121	Discussion

BIOE608 **Bioengineering Seminar Series**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

A variety of topics related to Bioengineering will be presented in weekly seminars.

Restriction: Must be in one of the following programs (ENGR: PhD Only-Bioengineering (Master's); ENGR: PhD Only-Bioengineering (Doctoral)).

0101	Giuliano Scarcelli	Seats (Total: 25)	
	F 9:00am - 9:50am	AJC 2132	

BIOE632 **Biophotonic Imaging and Microscopy**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Recommended: BIOE420. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE432, BIOE632, or BIOE689C.

Principles and instrumentation of various biomedical optical techniques including fluorescene and Raman spectroscopy, confocal and multi-photon microscopy, optical coherence tomography, and diffuse optical tomography. Biomedical aplications will also be discussed.

0101	Giuliano Scarcelli	Seats (Total: 10)	
	TuTh 8:00am - 9:15am	AJC 2132	

BIOE658I **Special Topics in Bioengineering (M.Eng.); Medical Imaging and Image Processing**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Research Oriented Individual Instruction course.

For Master of Engineering students only or with permission of department. This course is an introduction to biomedical imaging and image analysis. In this course, the fundamental physical principles behind the four primary medical imaging modalities - computed tomography, magnetic resonance imaging, ultrasound and nuclear medicine imaging - will be introduced. Introduction of each imaging modality will also include the clinical interpretation of images it produces. This course will also introduce medical image processing and new and emerging ways of using medical images for diagnosis and treatment.

0101	Yu Chen TuTh 2:00pm - 3:15pm	Seats (Total: 20) AJC 2132
BI01	Yu Chen Class time/details on ELMs	Seats (Total: 10) ONLINE

BIOE658P **Special Topics in Bioengineering (M.Eng.); Physiology for Bioengineers**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Research Oriented Individual Instruction course.

For Master of Engineering students only or with permission of department. Credit will only be granted for BIOE658P or BIOE689M. This course is aimed at providing the background biological knowledge for bioengineers to successfully assess the potential patho-physiological impact of their designs on biological systems. Course material focuses on cellular biology, signal transduction, the immune system, inflammation, and hemostasis.

0101	Martha Wang TuTh 12:30pm - 1:45pm	Seats (Total: 20) AJC 2119
BI01	Martha Wang Class time/details on ELMs	Seats (Total: 10) ONLINE

BIOE658W **Special Topics in Bioengineering (M.Eng.); Biosensor Techniques, Instrumentation, and Applications**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Research Oriented Individual Instruction course.

For Master of Engineering students only or with permission of department. Credit will only be granted for BIOE658W, BIOE631, or BIOE431. A thorough review of fundamental concepts of biosensing systems, principles of common detection methods, and modern applications of biosensors. Primarily literature driven. Students will obtain a detailed understanding of cutting-edge biosensing techniques, the instrumentation used, and the application space. Students also will develop skills in using current literature as a source of knowledge.

BI01	Ian White	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

BIOE689 **Special Topics in Bioengineering**

(Perm req)

Credits: 1-3 Grading Method: Regular

Research Oriented Individual Instruction course.

Contact department for information to register for this course.

BIOE689A **Special Topics in Bioengineering; Engineering Approaches to Photomedicine**

(Perm req)

Credits: 3 Grading Method: Regular

Research Oriented Individual Instruction course.

This course will introduce students to the fundamentals of photophysics, photochemistry, and photobiology. Engineering of selective photosensitizers, optically active nanomedicine and alternative light sources for photodynamic therapy, photothermal therapy, and imaging will be covered. Other light-based therapies, including laser surgery, low-level light therapy, and light-activated tissue repair and regeneration, will also be featured. The course will briefly cover radiation, magnetic, and ultrasound-based technologies to highlight other extrinsic activation mechanisms for drug delivery and phototherapy. Students will have the opportunity to review and present research articles on these emerging phototherapies and participate in lab experiments to gain a greater awareness of current advancements and refine skills in literature review.

0101	Huang Chiao Huang	Seats (Total: 20)
	TuTh 9:30am - 10:45am	AJC 2121

BIOE689K **Special Topics in Bioengineering; Cardiovascular Engineering**

(Perm req)

Credits: 3 Grading Method: Regular

Research Oriented Individual Instruction course.

An overview of engineering applications in the cardiovascular system. Covers cardiovascular anatomy, physiology and pathophysiology in the context of cell and tissue mechanics, fluid mechanics, thermodynamics, biotransport, neurovascular coupling, and imaging. Includes design of cardiovascular devices, sensors, biomaterials, and tissue engineered constructs.

0101	Alisa Clyne	Seats (Total: 15)
	Tu 12:30pm - 3:00pm	AJC 2134

BIOE689N **Special Topics in Bioengineering; Bionanotechnology**

(Perm req)

Credits: 3 Grading Method: Regular

Research Oriented Individual Instruction course.

Also offered as ENCH648N. Credit granted for ENCH648N or BIOE689N.

0101	Srinivasa Raghavan	Seats (Total: 33)
	TuTh 3:30pm - 4:45pm	CHE 2110

BIOE799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BIOE898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BIOE899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BIOL Biology Spring 2019

BIOL600 **Ethics in Scientific Research**

Credits: 2 Grading Method: Regular

Restriction: Must have completed at least one year of graduate study. Credit only granted for: BIOL600 or ZOOL600. Formerly: ZOOL600.

Issues of sceintific integrity with emphasis on investigators in the laboratory sciences, including mentoring, scientific record keeping, authorship and peer review, ownership of data, use of animals and humans in research, and conflict of interest.

Also offered as NACS600. Credit granted for BIOL600 or NACS600.

0101	Rochelle Newman	Seats (Total: 20)
	M 2:30pm - 4:10pm	LEF 1171

BIOL608J **Biology Seminar; Statistical Learning in Ecology and Evolution**

(Perm req)

Credits: 1 Grading Method: Regular

0101	Philip Johnson	Seats (Total: 10)
	Contact instructor or department for details.	

BIOL608L **Biology Seminar; Readings in Genetics**

(Perm req)

Credits: 2 Grading Method: Regular

0101	Thomas Kocher	Seats (Total: 10)
	Th 3:00pm - 5:00pm	BPS 1208

BIOL608Q **Biology Seminar; Readings in Neurophysiology**

(Perm req)

Credits: 1 Grading Method: Regular

0101	Elizabeth Quinlan	Seats (Total: 10)
	Contact instructor or department for details.	

BIOL609 **Special Problems in Biology**

Credits: 1-6 Grading Method: Regular

One seminar per week for each subject selected: A-Cell Biology; B-Developmental Biology; C-Estuarine and Marine Biology; D-Genetics; E-Parasitology; F-Physiology; G-Systematics and Evolutionary Biology; I-Behavior; J-General; K-Endocrinology; L-Ecology.

Contact department for information to register for this course.

BIOL705 **Statistics & Modeling for Biologists**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: BIOL705 or BIOL709F. Formerly: BIOL709F.

An overview of essential probability and statistics using R with a focus on biological problems. Topics include: parameter estimation (likelihood, Bayesian), confidence intervals and hypothesis testing, multiple testing, experimental design and power analysis, and resampling-based measures of uncertainty. Practical use of computers will be emphasized.

0101	Philip Johnson	Seats (Total: 25)	
	Tu 11:00am - 12:15pm Th 11:00am - 12:15pm	PLS 1115 PLS 1121	

BIOL708B **Advanced Topics in Biology**

Credits: 3 Grading Method: Regular

Lectures, experimental courses and other special instructions in variou zoological subjects.

0101	Gerald Borgia	Seats (Total: 1)	
	MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	BPS 0283 PLS 1119	Discussion

BIOL708E **Advanced Topics in Biology; Diseases of the Nervous System**

Credits: 3 Grading Method: Regular

Lectures, experimental courses and other special instructions in variou zoological subjects.

0101	Quentin Gaudry	Seats (Total: 8)	
	TuTh 2:00pm - 3:15pm	BPS 0283	

BIOL708R **Advanced Topics in Biology; Concepts in Plant and Animal Ecology**

Credits: 3 Grading Method: Regular

Lectures, experimental courses and other special instructions in variou zoological subjects.

0101	Karen Lips	Seats (Total: 5)	
	TuTh 9:30am - 10:45am W 12:00pm - 12:50pm	BPS 0283 BPS 2249	Discussion

BIOL709A **Selected Advanced Topics in Biology; Grant Writing**

Credits: 2 Grading Method: Regular, Audit

Lectures, experimental courses and other special instructions in various biological subjects.

Also offered as NACS728M. Credit granted for BIOL709A or NACS728M. Instruction in grant-writing skill, introduction to resources, discussions on how to make your grant competitive, and insight into the review process. The goal will be to have each participant submit an NRSA.

0101	Elizabeth Quinlan	Seats (Total: 14)
	Th 1:00pm - 3:00pm	BRB 3101

BIOL709R **Selected Advanced Topics in Biology; Membranes and Biological Interfaces**

Credits: 3 Grading Method: Regular, Audit

Lectures, experimental courses and other special instructions in various biological subjects.

0101	Sergei Sukharev	Seats (Total: 7)
	TuTh 3:30pm - 4:45pm	PLS 1111

BIOL799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BIOL898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BIOL899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BIOM Biometrics Spring 2019

BIOM301 **Introduction to Biometrics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR

Prerequisite: MATH113 or MATH115. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201.

Descriptive statistics, introduction to probability, sampling, confidence interval estimation, hypothesis testing, simple regression and correlation. Emphasis on simple applications of statistical techniques and interpretation of statistical results.

0101	Christine Hakenkamp TuTh 12:30pm - 1:20pm M 9:00am - 9:50am	Seats (Total: 28) EGR 1202 ANS 0473	 Discussion
0102	Christine Hakenkamp TuTh 12:30pm - 1:20pm M 10:00am - 10:50am	Seats (Total: 28) EGR 1202 ANS 0473	 Discussion
0103	Christine Hakenkamp TuTh 12:30pm - 1:20pm M 11:00am - 11:50am	Seats (Total: 28) EGR 1202 ANS 0473	 Discussion
0104	Christine Hakenkamp TuTh 12:30pm - 1:20pm Tu 8:30am - 9:20am	Seats (Total: 28) EGR 1202 ANS 0473	 Discussion
0105	Christine Hakenkamp TuTh 12:30pm - 1:20pm Tu 9:30am - 10:20am	Seats (Total: 28) EGR 1202 ANS 0473	 Discussion
0106	Christine Hakenkamp TuTh 12:30pm - 1:20pm Tu 11:00am - 11:50am	Seats (Total: 28) EGR 1202 ANS 0473	 Discussion
SG91	Christine Hakenkamp M 10:00am - 10:50am F 9:00am - 9:50am F 10:00am - 10:50am	Seats (Total: 40) BLD1 203 BLD1 203 BLD1 206	 Discussion
	Registration is restricted to Biological Sciences- Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.		

BIOM688A **Topics in Biometrics; Consulting Experience in Biometrics**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest in various areas of biometrics. Credit assigned will depend on lecture and/or laboratory time scheduled and organization of the course.

Contact department for information to register for this course.

BIOM688E **Topics in Biometrics; Computational and Statistical Genomics**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest in various areas of biometrics. Credit assigned will depend on lecture and/or laboratory time scheduled and organization of the course.

0101	Jiuzhou Song	Seats (Total: 15)
	MW 4:00pm - 5:15pm	ANS 0402

BIOM698 **Special Problems in Biometrics**

Credits: 1-3 Grading Method: Regular, Audit

Individual study of a particular topic in biostatistics or biomathematics.

Contact department for information to register for this course.

BIPH Biophysics Spring 2019

BIPH698L **Biophysics Seminar; Biophysics**

Credits: 1 Grading Method: Regular, Audit

0101	Arpita Upadhyaya	Seats (Total: 20)
	M 4:00pm - 5:30pm	CHM 0112

BIPH699 **Research in Biophysics**

(Perm req)

Credits: 2 Grading Method: Regular

Supervised research in biophysics laboratories. Rotations through several laboratories prior to a choice of laboratory for a research assistantship.

Contact department for information to register for this course.

BIPH898 **Pre-Candidacy Research**

(Perm req) Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BIPH899 **Doctoral Dissertation Research**

(Perm req) Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BISI Biological Sciences Spring 2019

BISI678B **Rotations in Biological Sciences; Rotations in BEES**

Credits: 1-3 Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Nathan Swenson	Seats (Total: 12)	
	TBA	BPS 1247	Lab

BISI678C **Rotations in Biological Sciences; Rotations in CBBG**

Credits: 1-3 Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Stephen Mount	Seats (Total: 12)	
	TBA	BPS 1247	Lab

BISI678D **Rotations in Biological Sciences; Program Director Rotations**

Credits: 1-3 Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Charles Delwiche	Seats (Total: 12)	
	TBA	BPS 1247	Lab

BISI678M **Rotations in Biological Sciences; Rotations in MOCB**

Credits: 1-3 Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Wade Winkler	Seats (Total: 12)	
	TBA	BPS 1247	Lab

BISI678P **Rotations in Biological Sciences; Rotations in PSYS**

Credits: 1-3 Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Ricardo Araneda	Seats (Total: 12)	
	TBA	BPS 1247	Lab

BISI712 **Responsible Conduct of Research for Biologists**

Credits: 1 Grading Method: Regular

Credit only granted for: BISI712, BISI688B, or CBMG688B. Formerly: BISI688B and CBMG688B.

An exploration of the ethical dimensions associated with the responsible conduct of scientific research focusing on providing students with practical insights into the existing norms and expectations of working scientists.

0101	Leslie Pick	Seats (Total: 20)	
	Meets March 18, 2019 - May 14, 2019		
	Tu 8:00am - 9:50am	PLS 4102	

BISI799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BISI898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BISI899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BMGT Business and Management Spring 2019

BMGT099 **Internship Seminar**

(Perm req)

Credits: 0 Grading Method: Sat-Fail

Complements students' supervised work experiences. Involves exploring career options, developing professional work skills, examining the relationship between internship and academic coursework. Course may be repeated.

Contact department for information to register for this course.

BMGT110 **Introduction to the Business Value Chain**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: IE

Students are provided with an introduction to the business value chain with an emphasis on inter-organizational and intra-organizational coordination of core business processes. Emphasis is on cross-functional integration and the efficient and effective management of core processes with an emphasis on marketing, operations and supply chain management.

0101	Jeff Miller MW 12:30pm - 1:45pm	Seats (Total: 250) VMH 1212

BMGT110S **Introduction to the Business Value Chain**

Credits: 3 Grading Method: Regular CORE: IE

Restricted to College Park Scholars in Business, Society, and the Economy.

0101	Jeff Miller TuTh 3:30pm - 4:45pm	Seats (Total: 40) SQH 1101
0201	Jeff Miller TuTh 2:00pm - 3:15pm	Seats (Total: 40) VMH 1207

BMGT190H **Introduction to Design and Quality**

Credits: 4 Grading Method: Regular General Education: DSSP

Restriction: Must be in the Quest program. Also offered as: ENES190. Credit only granted for: BMGT190 or ENES190.

QUEST students learn and apply design practices to design new products and services. Working in multidisciplinary teams, students use quality and process improvement methods to identify, analyze, and recommend solutions to real-world problems.

Restricted to QUEST program students. Also offered as ENES190H. Credit granted for ENES190H or BMGT190H.

0101	Pamela Armstrong	Seats (Total: 45)	
	TuTh 12:30pm - 1:45pm	ESJ 2212	
	Tu 6:00pm - 7:50pm	VMH 1412	Discussion

BMGT210 **Foundations of Accounting for Non Business Majors**

Credits: 3 Grading Method: Regular

Restriction: Must not have completed BMGT221; and must not be in a major in the R.H. Smith School of Business. Credit only granted for: (BMGT220 and BMGT221) or BMGT210. Additional information: Does not apply to a Smith School degree. Students pursuing a Smith School minor who have completed both BMGT220 and BMGT221 may substitute these courses for BMGT210. Credit will not be given for both BMGT210 and the combination of BMGT220 and BMGT221.

Provides an understanding of the common statements that report a company's profitability and financial health, and are useful to all economic agents who are engaged with the firm. Students will also recognize and understand managerial accounting as a system for accumulating and modeling information to support decision-making.

Restricted to General Business Minors.

0101	Eugene Cantor	Seats (Total: 60)	
	MW 3:30pm - 4:45pm	TWS 1310	

BMGT220 **Principles of Accounting I**

Credits: 3 Grading Method: Regular

Basic theory and techniques of contemporary financial accounting. Includes the accounting cycle and the preparation of financial statements for single owner and partnership forms of business organizations operating as service companies or merchandisers.

Restricted to students with 24 credit hours completed. Where a BMGT exam conflicts with another regularly scheduled class, the student will be provided a makeup exam.

0101	Progyan Basu	Seats (Total: 38)	
	MW 2:00pm - 3:15pm	VMH 1212	
	F 9:00am - 9:50am	VMH 1202	Discussion
0102	Progyan Basu	Seats (Total: 38)	
	MW 2:00pm - 3:15pm	VMH 1212	
	F 10:00am - 10:50am	VMH 1202	Discussion

0103	Progyan Basu MW 2:00pm - 3:15pm F 11:00am - 11:50am	Seats (Total: 38) VMH 1212 VMH 1202	 Discussion
0104	Progyan Basu MW 2:00pm - 3:15pm F 12:00pm - 12:50pm	Seats (Total: 38) VMH 1212 VMH 1202	 Discussion
0105	Progyan Basu MW 2:00pm - 3:15pm F 1:00pm - 1:50pm	Seats (Total: 38) VMH 1212 VMH 1202	 Discussion
0201	Progyan Basu MW 11:00am - 12:15pm F 9:00am - 9:50am	Seats (Total: 38) VMH 1212 VMH 1206	 Discussion
0202	Progyan Basu MW 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 38) VMH 1212 VMH 1206	 Discussion
0203	Progyan Basu MW 11:00am - 12:15pm F 11:00am - 11:50am	Seats (Total: 38) VMH 1212 VMH 1206	 Discussion
0204	Progyan Basu MW 11:00am - 12:15pm F 12:00pm - 12:50pm	Seats (Total: 38) VMH 1212 VMH 1206	 Discussion
0205	Progyan Basu MW 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 38) VMH 1212 VMH 1206	 Discussion

BMGT220H **Principles of Accounting I**

Credits: 3 Grading Method: Regular

Basic theory and techniques of contemporary financial accounting. Includes the accounting cycle and the preparation of financial statements for single owner and partnership forms of business organizations operating as service companies or merchandisers.

Restricted to Honors students with 24 hours completed.

0101	Hanna Lee TuTh 9:30am - 10:45am	Seats (Total: 35) VMH 1518	

BMGT221 **Principles of Accounting II**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220.

Basic theory and techniques of accounting for managerial decision making. Involves the introduction of the corporation and manufacturing operations. Includes cost-volume-profit analysis and capital budgeting. Introduces the topics of income taxation and international accounting.

Restricted to students with 24 credit hours completed. Where a BMGT exam conflicts with another regularly scheduled class, the student will be provided a makeup exam.

0101	Gary Bulmash TuTh 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 30) VMH 1524 VMH 1303	 Discussion
0102	Gary Bulmash TuTh 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 30) VMH 1524 VMH 1303	 Discussion
0103	Gary Bulmash TuTh 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 30) VMH 1524 VMH 1303	 Discussion
0104	Gary Bulmash TuTh 9:30am - 10:45am F 1:00pm - 1:50pm	Seats (Total: 30) VMH 1524 VMH 1303	 Discussion
0201	Gary Bulmash TuTh 3:30pm - 4:45pm F 9:00am - 9:50am	Seats (Total: 30) VMH 1524 VMH 1307	 Discussion
0202	Gary Bulmash TuTh 3:30pm - 4:45pm F 10:00am - 10:50am	Seats (Total: 30) VMH 1524 VMH 1307	 Discussion
0203	Gary Bulmash TuTh 3:30pm - 4:45pm F 11:00am - 11:50am	Seats (Total: 30) VMH 1524 VMH 1307	 Discussion

0204	Gary Bulmash TuTh 3:30pm - 4:45pm F 12:00pm - 12:50pm	Seats (Total: 30) VMH 1524 VMH 1307	 Discussion
0205	Gary Bulmash TuTh 3:30pm - 4:45pm F 1:00pm - 1:50pm	Seats (Total: 30) VMH 1524 VMH 1307	 Discussion
0301	Gary Bulmash TuTh 2:00pm - 3:15pm F 9:00am - 9:50am	Seats (Total: 30) VMH 1524 VMH 1336	 Discussion
0302	Gary Bulmash TuTh 2:00pm - 3:15pm F 10:00am - 10:50am	Seats (Total: 30) VMH 1524 VMH 1336	 Discussion
0303	Gary Bulmash TuTh 2:00pm - 3:15pm F 11:00am - 11:50am	Seats (Total: 30) VMH 1524 VMH 1336	 Discussion
0304	Gary Bulmash TuTh 2:00pm - 3:15pm F 12:00pm - 12:50pm	Seats (Total: 30) VMH 1524 VMH 1336	 Discussion
0305	Gary Bulmash TuTh 2:00pm - 3:15pm F 1:00pm - 1:50pm	Seats (Total: 30) VMH 1524 VMH 1336	 Discussion

BMGT221H **Principles of Accounting II**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220.

Basic theory and techniques of accounting for managerial decision making. Involves the introduction of the corporation and manufacturing operations. Includes cost-volume-profit analysis and capital budgeting. Introduces the topics of income taxation and international accounting.

Restricted to Honors students with 24 hours completed. Where a BMGT exam conflicts with another regularly scheduled class, the student will be provided a makeup exam.

0101	Martin Loeb TuTh 3:30pm - 4:45pm	Seats (Total: 35) VMH 1518	

BMGT230 **Business Statistics**

Credits: 3 Grading Method: Regular General Education: FSAR

Prerequisite: MATH113 or MATH115; or must have math eligibility of MATH120 or higher. Restriction: Must not have completed ENCE302, ENME392, STAT400, BMGT231, or ENEE324. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introductory course in probabilistic and statistical concepts including descriptive statistics, set-theoretic development of probability, the properties of discrete and continuous random variables, sampling theory, estimation, hypothesis testing, regression and decision theory and the application of these concepts to problem solving in business and management.

Where a BMGT exam conflicts with a regularly scheduled class, the student will be provided with a makeup exam.

0101	Erich Studer-Ellis MW 11:00am - 12:15pm F 8:00am - 8:50am	Seats (Total: 30) VMH 1524 VMH 1411	 Discussion
0102	Erich Studer-Ellis MW 11:00am - 12:15pm F 9:00am - 9:50am	Seats (Total: 30) VMH 1524 VMH 1411	 Discussion
0103	Erich Studer-Ellis MW 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 15) VMH 1524 VMH 1411	 Discussion
0104	Erich Studer-Ellis MW 11:00am - 12:15pm F 11:00am - 11:50am	Seats (Total: 30) VMH 1524 VMH 1411	 Discussion
0105	Erich Studer-Ellis MW 11:00am - 12:15pm F 12:00pm - 12:50pm	Seats (Total: 15) VMH 1524 VMH 1411	 Discussion
0106	Erich Studer-Ellis MW 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 30) VMH 1524 VMH 1411	 Discussion

0107	Erich Studer-Ellis MW 11:00am - 12:15pm F 2:00pm - 2:50pm	Seats (Total: 30) VMH 1524 VMH 1411	 Discussion
0201	Erich Studer-Ellis MW 12:30pm - 1:45pm F 8:00am - 8:50am	Seats (Total: 30) VMH 1524 VMH 1314	 Discussion
0202	Erich Studer-Ellis MW 12:30pm - 1:45pm F 9:00am - 9:50am	Seats (Total: 29) VMH 1524 VMH 1314	 Discussion
0203	Erich Studer-Ellis MW 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 30) VMH 1524 VMH 1314	 Discussion
0204	Erich Studer-Ellis MW 12:30pm - 1:45pm F 11:00am - 11:50am	Seats (Total: 24) VMH 1524 VMH 1314	 Discussion
0205	Erich Studer-Ellis MW 12:30pm - 1:45pm F 12:00pm - 12:50pm	Seats (Total: 30) VMH 1524 VMH 1314	 Discussion
0206	Erich Studer-Ellis MW 12:30pm - 1:45pm F 1:00pm - 1:50pm	Seats (Total: 15) VMH 1524 VMH 1314	 Discussion
0207	Erich Studer-Ellis MW 12:30pm - 1:45pm F 2:00pm - 2:50pm	Seats (Total: 30) VMH 1524 VMH 1314	 Discussion
0301	Erich Studer-Ellis MW 9:30am - 10:45am F 8:00am - 8:50am	Seats (Total: 30) VMH 1524 VMH 1418	 Discussion
0302	Erich Studer-Ellis MW 9:30am - 10:45am F 9:00am - 9:50am	Seats (Total: 30) VMH 1524 VMH 1418	 Discussion

0303	Erich Studer-Ellis MW 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 16) VMH 1524 VMH 1418	 Discussion
0304	Erich Studer-Ellis MW 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 25) VMH 1524 VMH 1418	 Discussion
0305	Erich Studer-Ellis MW 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 22) VMH 1524 VMH 1418	 Discussion
0306	Erich Studer-Ellis MW 9:30am - 10:45am F 1:00pm - 1:50pm	Seats (Total: 30) VMH 1524 VMH 1418	 Discussion
0307	Erich Studer-Ellis MW 9:30am - 10:45am F 2:00pm - 2:50pm	Seats (Total: 30) VMH 1524 VMH 1418	 Discussion
0401	Daehoon Noh TuTh 2:00pm - 3:15pm	Seats (Total: 30) SQH 2120	

BMGT230B **Business Statistics**

Credits: 3 Grading Method: Regular General Education: FSAR

Prerequisite: MATH113 or MATH115; or must have math eligibility of MATH120 or higher. Restriction: Must not have completed ENCE302, ENME392, STAT400, BMGT231, or ENEE324. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introductory course in probabilistic and statistical concepts including descriptive statistics, set-theoretic development of probability, the properties of discrete and continuous random variables, sampling theory, estimation, hypothesis testing, regression and decision theory and the application of these concepts to problem solving in business and management.

Restricted to BMGT majors. Where a BMGT exam conflicts with a regularly scheduled class, the student will be provided a makeup exam.

0103	Erich Studer-Ellis MW 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 15) VMH 1524 VMH 1411	Discussion
0105	Erich Studer-Ellis MW 11:00am - 12:15pm F 12:00pm - 12:50pm	Seats (Total: 15) VMH 1524 VMH 1411	Discussion
0202	Erich Studer-Ellis MW 12:30pm - 1:45pm F 9:00am - 9:50am	Seats (Total: 1) VMH 1524 VMH 1314	Discussion
0204	Erich Studer-Ellis MW 12:30pm - 1:45pm F 11:00am - 11:50am	Seats (Total: 6) VMH 1524 VMH 1314	Discussion
0206	Erich Studer-Ellis MW 12:30pm - 1:45pm F 1:00pm - 1:50pm	Seats (Total: 15) VMH 1524 VMH 1314	Discussion
0303	Erich Studer-Ellis MW 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 14) VMH 1524 VMH 1418	Discussion
0304	Erich Studer-Ellis MW 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 5) VMH 1524 VMH 1418	Discussion
0305	Erich Studer-Ellis MW 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 8) VMH 1524 VMH 1418	Discussion

BMGT289A **Social Enterprise: Changing the World through Innovation and Transformative Action**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSSP, SCIS

0101	Le-Marie Thompson W 5:00pm - 7:40pm	Seats (Total: 60) TYD 2109	
0201	Christopher Gresham M 5:00pm - 7:40pm	Seats (Total: 60) TYD 2109	

BMGT289B **How Do Innovators Think?**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP, SCIS

Credit only granted for BMGT289B or HONR289P. Course will meet 4 times on Monday evenings for assessments and guest speaker presentations.

0101	Mark Wellman M 10:00am - 11:50am M 6:30pm - 9:15pm	Seats (Total: 60) CCC 1205 VMH 1212
0201	Mark Wellman M 12:00pm - 1:50pm M 6:30pm - 9:15pm	Seats (Total: 60) CCC 1205 VMH 1212

BMGT289D **Frauds, Scams, and Thefts: What, How and Why?**

Credits: 3 | Grading Method: Regular | General Education: DSSP, SCIS

0101	Samuel Handwerger MW 5:00pm - 6:15pm	Seats (Total: 60) ESJ 2212

BMGT289E **Entrepreneurial Thinking for Non-Business Majors: How Not to Miss Great Opportunities Your Life Throws at You**

Credits: 3 | Grading Method: Regular | CORE: IE | General Education: DSSP, SCIS

0101	Jonathan Aberman MW 3:30pm - 4:45pm	Seats (Total: 60) TYD 2109

BMGT289I **Why Good Managers Make Bad Decisions**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: MS | General Education: DSSP, SCIS

0101	Jeff Miller MW 3:30pm - 4:45pm	Seats (Total: 240) VMH 1524

BMGT289M **European Debt Crisis: More Integration or Withering of a Dream?**

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

0101	Ulrich Hewer Tu 5:00pm - 7:40pm	Seats (Total: 60) SQH 1120

BMGT301 Introduction to Information Systems

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business. Additional information: CMSC majors will not receive credit for this course towards their upper level concentration in their CMSC major. All BMGT majors, including students who are a double major in CMCS, must complete BMGT301 for their BMGT degree.

Comprehensive overview of information systems (IS), which explores the strategic and tactical nature of IS. The basic concepts in analyzing and designing information systems for business applications will be presented. Aspects of data management such as databases, data warehousing, data analysis, and data mining will be analyzed, and the basics of web page and web site design will be outlined. Students will also be introduced to modern information systems infrastructure such as telecommunications, networks, and information systems security. Knowledge of Excel or a similar spreadsheet tool.

0101	Zeinab Karake TuTh 11:00am - 12:15pm *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 60) VMH 1412
0201	Gorkem Ozer TuTh 3:30pm - 4:45pm *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 60) VMH 1412
0301	Zeinab Karake TuTh 12:30pm - 1:45pm *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 60) VMH 1412
0401	Zeinab Karake TuTh 9:30am - 10:45am *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 60) VMH 1412
0501	Zeinab Karake MW 11:00am - 12:15pm *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 60) VMH 1520

SG92	Jaehoon Jeong	Seats (Total: 60)
	TuTh 11:00am - 12:15pm	BLD3 2230
	Restricted to Junior BMGT-Shady Grove students majoring in Accounting Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	
SG93	Anand Gopal	Seats (Total: 50)
	TuTh 12:30pm - 1:45pm	BLD3 3220
	Restricted to Junior BMGT-Shady Grove students majoring in Marketing and Management. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

BMGT301F **Introduction to Information Systems**

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business. Additional information: CMSC majors will not receive credit for this course towards their upper level concentration in their CMSC major. All BMGT majors, including students who are a double major in CMCS, must complete BMGT301 for their BMGT degree.

Comprehensive overview of information systems (IS), which explores the strategic and tactical nature of IS. The basic concepts in analyzing and designing information systems for business applications will be presented. Aspects of data management such as databases, data warehousing, data analysis, and data mining will be analyzed, and the basics of web page and web site design will be outlined. Students will also be introduced to modern information systems infrastructure such as telecommunications, networks, and information systems security. Knowledge of Excel or a similar spreadsheet tool.

Restricted to second year students in the Smith School's Smith Start Program (FPFF).

FP01	Zeinab Karake	Seats (Total: 60)
	MW 9:30am - 10:45am	VMH 1520

BMGT302 **Designing Applications for Business Analytics**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT301; or permission of BMGT-Robert H. Smith School of Business. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business; and must not be in Computer Science program.

Provides an introduction to structured programming with business applications. Programming logic and data structures are introduced. The course especially emphasizes hands-on exercises using Excel macros and Visual Basic for Applications (VBA), and covers business functions and analytics.

Restricted to BMGT majors with 53 credit hours completed. Not open to Computer Science Majors.

0101	Woei-Jyh Lee TuTh 9:30am - 10:45am	Seats (Total: 32) VMH 2203
0201	Wei Chen MW 9:30am - 10:45am	Seats (Total: 32) VMH 2203
0301	Woei-Jyh Lee TuTh 11:00am - 12:15pm	Seats (Total: 32) VMH 2203
0401	Woei-Jyh Lee TuTh 2:00pm - 3:15pm	Seats (Total: 24) VMH 3522
0501	Woei-Jyh Lee MW 3:30pm - 4:45pm	Seats (Total: 32) VMH 2203

BMGT310 **Intermediate Accounting I**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

Comprehensive analysis of financial accounting topics related to financial statement preparation and external reporting.

0101	Tharinda W Ranasinghe TuTh 2:00pm - 3:15pm *Restricted to Accounting and Finance majors with 53 credit hours comple ted.*	Seats (Total: 30) VMH 1303
0201	Mary Keim TuTh 12:30pm - 1:45pm *Restricted to Accounting and Finance majors with 53 credit hours comple ted.*	Seats (Total: 30) VMH 1314
0301	Mary Keim TuTh 11:00am - 12:15pm *Restricted to Accounting and Finance majors with 53 credit hours comple ted.*	Seats (Total: 30) VMH 1314

SG91	Samuel Handwerger MW 2:00pm - 3:15pm	Seats (Total: 35) BLD2 2062
	Restricted to BMGT-Shady Grove students majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

BMGT311 Intermediate Accounting II

Credits: 3 Grading Method: Regular

Prerequisite: BMGT310.

Continuation of BMGT310.

0101	Oliver Kim MW 11:00am - 12:15pm	Seats (Total: 35) VMH 1314
	Restricted to Accounting majors with 60 credit hours completed.	
0201	Oliver Kim MW 12:30pm - 1:45pm	Seats (Total: 35) VMH 1314
	Restricted to Accounting majors with 60 credit hours completed.	
0301	Oliver Kim MW 2:00pm - 3:15pm	Seats (Total: 35) VMH 1415
	Restricted to Accounting majors with 60 credit hours completed.	
SG91	Stephen Brown MW 9:30am - 10:45am	Seats (Total: 35) BLD2 1032
	Restricted to Junior BMGT-Shady Grove students majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	
SG92	Stephen Brown MW 11:00am - 12:15pm	Seats (Total: 35) BLD2 1032
	Restricted to Junior BMGT-Shady Grove students majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

BMGT313 Financial Statement Analysis

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

Provides students with the tools to conduct a financial statement analysis, which is part of an overall business analysis. Involves understanding and using the information that financial statements are communicating to users.

Restricted to Finance or Accounting majors with 53 credit hours completed.

0101	Hanna Lee TuTh 2:00pm - 3:15pm	Seats (Total: 45) VMH 1415
0201	Hanna Lee TuTh 3:30pm - 4:45pm	Seats (Total: 45) VMH 1415

BMGT321 Managerial Accounting

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

A study of the basic concepts of product costing and cost analysis for management planning and control. Emphasis is placed on the role of the accountant in organizational management, analysis of cost behavior, standard cost budgeting, responsibility accounting and relevant costs for decision-making.

Restricted to BMGT majors with 53 credit hours completed.

0101	Michael Finch MW 2:00pm - 3:15pm	Seats (Total: 30) VMH 1206
0201	Michael Finch MW 11:00am - 12:15pm	Seats (Total: 30) VMH 1311
0301	Michael Finch MW 12:30pm - 1:45pm	Seats (Total: 30) VMH 1311

BMGT323 Taxation of Individuals

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

Federal taxation of individuals focusing on income, exclusions, deductions, depreciation, credits and capital transactions. Property coverage includes the tax consequences of sales and dispositions of investment and business assets. Both tax planning and compliance issues are covered.

0101	Leslie Mostow MW 2:00pm - 3:15pm *Restricted to Accounting majors with 53 credit hours completed.*	Seats (Total: 35) VMH 1518
0201	Samuel Handwerger TuTh 9:30am - 10:45am *Restricted to Accounting majors with 53 credit hours completed.*	Seats (Total: 35) VMH 1314
0301	Leslie Mostow MW 12:30pm - 1:45pm *Restricted to Accounting majors with 53 credit hours completed.*	Seats (Total: 35) VMH 1335
SG91	Alexander Ruygrok MW 9:30am - 10:45am *Restricted to Junior BMGT-Shady Grove students majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 35) BLD2 3012
SG92	Alexander Ruygrok MW 11:00am - 12:15pm *Restricted to Junior BMGT-Shady Grove students majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 35) BLD2 3012

BMGT326 Accounting Systems

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221; and (BMGT201 or BMGT301).

A study of accounting systems and computer and communications technology.

0101	Lei Zhou TuTh 2:00pm - 3:15pm *Restricted to Accounting majors with 60 credit hours completed.*	Seats (Total: 35) VMH 1518
0201	James McKinney MW 5:00pm - 6:15pm *Restricted to Accounting majors with 60 credit hours completed.*	Seats (Total: 35) VMH 1335

0301	Lei Zhou TuTh 12:30pm - 1:45pm	Seats (Total: 35) VMH 1206
	Restricted to Accounting majors with 60 credit hours completed.	
SG91	Lei Zhou MW 9:30am - 10:45am	Seats (Total: 35) BLD2 3062
	Restricted to Senior BMGT-Shady Grove students majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	
SG92	Lei Zhou MW 11:00am - 12:15pm	Seats (Total: 35) BLD2 3062
	Restricted to Senior BMGT-Shady Grove students majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

BMGT332 **Quantitative Models for Management Decisions**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT231 or BMGT230; or students who have taken courses with comparable content may contact the department.

The aim of this course is to introduce management science techniques for informed decision-making that can be applied in spreadsheet models to assist in the decision-analysis process. Models include Linear Programming, Transportation and Assignment problems, network flow models, Integer and non-linear programming, Simulation and Decision Trees.

Restricted to BMGT majors and QUEST program students with 53 credit hours completed.

0101	Kazim Ruhi TuTh 11:00am - 12:15pm	Seats (Total: 45) VMH 1520
0201	Kazim Ruhi TuTh 3:30pm - 4:45pm	Seats (Total: 45) VMH 1520
0301	Wenchang Zhang TuTh 5:00pm - 6:15pm	Seats (Total: 45) VMH 1303

BMGT340 **Business Finance**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220; and (BMGT231 or BMGT230).

Topics include: the principles and practices involved in the organization, financing and rehabilitation of business enterprises; the various types of securities and their use in raising funds, apportioning income, risk and control; intercorporate relations; and new developments. Emphasis on solution of problems of financial policy faced by management.

Restricted to BMGT majors with 53 credit hours completed. Interested students who don't meet restrictions should review their eligiblity for BMGT340N. Meets in a blended format. Approximately half of the scheduled face-to-face course meetings will be replaced by asynchronous online activities, including video lectures, quizzes, and graded assignments.

0101	Karen Hallows MW 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 56) VMH 1520 ONLINE
0201	Karen Hallows MW 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 60) VMH 1520 ONLINE
0301	Karen Hallows TuTh 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 60) VMH 1528 ONLINE
0401	Michael Padhi MW 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 50) VMH 1206 ONLINE
0501	Karen Hallows TuTh 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 60) VMH 1520 ONLINE
0601	Michael Padhi MW 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 50) VMH 1206 ONLINE
0701	Karen Hallows TuTh 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 60) VMH 1303 ONLINE

BMGT340N **Business Finance**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220; and (BMGT231 or BMGT230).

Topics include: the principles and practices involved in the organization, financing and rehabilitation of business enterprises; the various types of securities and their use in raising funds, apportioning income, risk and control; intercorporate relations; and new developments. Emphasis on solution of problems of financial policy faced by management.

Restricted to Agricultural and Resource Economics majors (0111C) with 53 credit hours completed.

0101	Karen Hallows MW 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 4) VMH 1520 ONLINE

BMGT341 **Financial Markets**

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in BMGT340. Formerly: BMGT498G.

Shows the interconnectedness of the markets. The role of the Central bank and monetary policy is included in this context. Students develop an understanding of: (i) the determination of interest rates; (ii) financial instruments, markets and institutions; (iii) the impact of monetary policy on institutions; and (iv) how financial innovations create markets.

Restricted to Finance majors with 60 credits completed.

0101	Julie Pavlovsky TuTh 11:00am - 12:15pm	Seats (Total: 45) VMH 1415
0201	Julie Pavlovsky TuTh 3:30pm - 4:45pm	Seats (Total: 45) VMH 1206

BMGT341F **Financial Markets**

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in BMGT340. Formerly: BMGT498G.

Shows the interconnectedness of the markets. The role of the Central bank and monetary policy is included in this context. Students develop an understanding of: (i) the determination of interest rates; (ii) financial instruments, markets and institutions; (iii) the impact of monetary policy on institutions; and (iv) how financial innovations create markets.

Restricted to Sophomore Wall Street Fellows. The program code for the restriction is FPAF.

FP01	Julie Pavlovsky TuTh 9:30am - 10:45am	Seats (Total: 35) VMH 1415

BMGT343 **Investments**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340. Credit only granted for: BMGT343 or ECON435. Additional information: This course cannot be used to fulfill any requirements for majors in Economics.

An introduction to financial investments. Topics include: securities and securities markets; investment risks, returns and constraints; portfolio policies; and institutional investment policies.

0101	Mark Flood TuTh 2:00pm - 3:15pm *Restricted to Finance majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1206
0201	Mark Flood TuTh 12:30pm - 1:45pm *Restricted to Finance majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1311
0301	Shrihari Santosh MW 2:00pm - 3:15pm *Restricted to Finance majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1311
0401	Shrihari Santosh MW 3:30pm - 4:45pm *Restricted to Finance majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1311
0501	Shrihari Santosh MW 5:00pm - 6:15pm *Restricted to Finance majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1311
SG91	Michael Padhi TuTh 12:30pm - 1:45pm *Restricted to BMGT-Shady Grove Seniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 45) BLD2 2062

BMGT345 **Foundations of Financial Management for Non Business Majors**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT210 or BMGT220. Restriction: Must not have completed BMGT340; and must not be a major in the R.H. Smith School of Business. Credit only granted for: BMGT345 or BMGT340. Additional information: Course does not apply to a Smith School degree. BMGT340 may substitute for BMGT345.

Provides students an overview of financial management. Students will understand how a business allocates financial resources in an uncertain environment to maximize shareholder value. In addition students will learn the following: how to apply accounting principles to corporate finance; how to value assets, projects, companies and investment securities; understand the relationship between risk and return and how it impacts investment and corporate decisions; how to calculate a company's cost of capital, and develop an intuitive comprehension of financial concepts and analysis.

Restricted to General Business Minors.

0101	William MacDonald MW 9:30am - 10:45am	Seats (Total: 120) VMH 1212

BMGT350 **Marketing Principles and Organization**

Credits: 3 Grading Method: Regular

Recommended: ECON200.

An introduction to the concepts and principles of marketing including the marketing of service and nonprofit organizations. Provides an overview of all the concepts in marketing including relationship marketing, product development, pricing, promotion, marketing research, consumer behavior, international marketing, distribution and internal marketing to employees.

Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT 350N.

0101	Henry Boyd M 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 65) VMH 1412 ONLINE
0201	Henry Boyd M 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 65) VMH 1412 ONLINE
0301	Henry Boyd M 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 65) VMH 1412 ONLINE

0401	Katherine Boyle W 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 65) VMH 1212 ONLINE
0501	Roxanne Lefkoff W 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 56) VMH 1412 ONLINE
0601	Roxanne Lefkoff W 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 65) VMH 1412 ONLINE
0701	Roxanne Lefkoff W 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 65) VMH 1412 ONLINE

BMGT350M **Marketing Principles and Organization**

Credits: 3 Grading Method: Regular

Recommended: ECON200.

An introduction to the concepts and principles of marketing including the marketing of service and nonprofit organizations. Provides an overview of all the concepts in marketing including relationship marketing, product development, pricing, promotion, marketing research, consumer behavior, international marketing, distribution and internal marketing to employees.

Restricted to General Business minors (#BU02).

0101	Mary Beth Furst Tu 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 40) SQH 1101 ONLINE
0201	Katherine Boyle Tu 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 40) SQH 1103 ONLINE

BMGT350N **Marketing Principles and Organization**

Credits: 3 Grading Method: Regular

Recommended: ECON200.

An introduction to the concepts and principles of marketing including the marketing of service and nonprofit organizations. Provides an overview of all the concepts in marketing including relationship marketing, product development, pricing, promotion, marketing research, consumer behavior, international marketing, distribution and internal marketing to employees.

Restricted to Agricultural and Resource Economics (0111C) and Horticulture (0107C) majors with 53 credit hours completed.

0501	Roxanne Lefkoff W 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 9) VMH 1412 ONLINE

BMGT360 **Strategic Management of Human Capital**

Credits: 3 Grading Method: Regular

Provides students with the basic knowledge needed to help organizations attract, select, develop, engage, evaluate, and retain talent. Topics covered may include strategic HRM, the role of globalization, legal issues in HRM, work analysis, HR planning, recruitment, personnel selection, performance management and appraisal, training and development, career development, compensation systems, motivating and rewarding performance, labor relations, and employee health and safety.

Restricted to students with 53 credit hours completed.

0101	Jeffrey Kudisch TuTh 2:00pm - 3:15pm	Seats (Total: 60) VMH 1212
0201	Jeffrey Kudisch TuTh 3:30pm - 4:45pm	Seats (Total: 60) VMH 1212

BMGT362 **Negotiations**

Credits: 3 Grading Method: Regular

Restriction: Must not have completed COMM425. Credit only granted for: BMGT362 or COMM425.

By using a variety of assessment tools, feedback sources, skill-building exercises, and exercise debriefings, this experiential course is designed to enhance students' negotiating self-confidence and improve students' analytical skills, interpersonal skills, creativity and persuasive abilities.

Restricted to Management majors with 53 credit hours completed.

0101	Jeffrey Kudisch MW 3:30pm - 4:45pm	Seats (Total: 45) VMH 1415

BMGT363 **Leadership and Teamwork in Organizations**

Credits: 3 Grading Method: Regular

Provides a comprehensive understanding of fundamental leadership concepts, theories, and skills in organizations and applies to assessing and developing effective leadership practices in organizations.

0101	Gerald Suarez MW 5:00pm - 6:15pm	Seats (Total: 45) VMH 1303
	Restricted to Management & Entrepreneurship majors with 53 credit hours completed.	
SG91	Gerald Suarez MW 11:00am - 12:15pm	Seats (Total: 60) BLD3 3241
	Restricted to Senior BMGT-Shady Grove students majoring in Management and Marketing. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	
SG92	Gosia Langa Basit MW 9:30am - 10:45am	Seats (Total: 60) BLD3 3241
	Restricted to SG juniors Management and Marketing majors .	

BMGT364 **Managing People and Organizations**

Credits: 3 Grading Method: Regular

An introduction to selected aspects of human behavior in organizations generally known as organizational behavior (OB). This course is designed to help students develop systematic and fundamental understanding of people and their behaviors in organizations, as well as useful abilities and skills required to effectively and ethically manage various individual, interpersonal, group, and organization-level processes.

Restricted to BMGT majors with 53 credit hours completed. This course requires the purchase of course materials other than standard textbooks for in class simulations. Students will be required to purchase these materials directly from the simulation publisher(s) at a cost of approximately $20(discounts applied for number of students enrolled in course). More information on purchasing these materials will be available when the course begins.

0101	Jennifer Marr MW 9:30am - 10:45am	Seats (Total: 60) VMH 1303
0201	Jennifer Marr MW 11:00am - 12:15pm	Seats (Total: 60) VMH 1303

0301	Gregory Marr TuTh 12:30pm - 1:45pm	Seats (Total: 40) VMH 1212
0401	Jennifer Marr MW 2:00pm - 3:15pm	Seats (Total: 60) VMH 1303
0501	Taiyi Yan MW 3:30pm - 4:45pm	Seats (Total: 60) VMH 1303
0601	Gregory Marr TuTh 9:30am - 10:45am	Seats (Total: 60) VMH 1212
0701	Nicole Coomber TuTh 11:00am - 12:15pm	Seats (Total: 60) VMH 1212

BMGT364H **Managing People and Organizations**

(Perm req)

Credits: 3 Grading Method: Regular

An introduction to selected aspects of human behavior in organizations generally known as organizational behavior (OB). This course is designed to help students develop systematic and fundamental understanding of people and their behaviors in organizations, as well as useful abilities and skills required to effectively and ethically manage various individual, interpersonal, group, and organization-level processes.

Restricted to BMGT Honors students with 53 credit hours completed.

0101	Nicole Coomber TuTh 3:30pm - 4:45pm	Seats (Total: 35) VMH 1418

BMGT364M **Managing People and Organizations**

Credits: 3 Grading Method: Regular

An introduction to selected aspects of human behavior in organizations generally known as organizational behavior (OB). This course is designed to help students develop systematic and fundamental understanding of people and their behaviors in organizations, as well as useful abilities and skills required to effectively and ethically manage various individual, interpersonal, group, and organization-level processes.

Restricted to General Business minors.

0101	Nicole Coomber M 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 120) ESJ 2204 ONLINE

BMGT364N **Managing People and Organizations**

Credits: 3 Grading Method: Regular

An introduction to selected aspects of human behavior in organizations generally known as organizational behavior (OB). This course is designed to help students develop systematic and fundamental understanding of people and their behaviors in organizations, as well as useful abilities and skills required to effectively and ethically manage various individual, interpersonal, group, and organization-level processes.

Restricted to Agricultural and Resource Economics (0111C) and Dietetics (1307D) majors with 53 credit hours completed. This course requires the purchase of course materials other than standard textbooks for in class simulations. Students will be required to purchase these materials directly from the simulation publisher(s) at a cost of appoximately $20(discounts applied for number of students enrolled in course). More information on purchasing these materials will be available when the course begins.

0301	Gregory Marr TuTh 12:30pm - 1:45pm	Seats (Total: 20) VMH 1212

BMGT365 **Entrepreneurial Finance and Private Equity**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT461 or BMGT361. Restriction: Junior standing or higher. Credit only granted for: BMGT365, ENES466 or HLMN471.

Studies venture capital and private equity using a combination of cases lectures and guest speakers. Addresses how venture capitalists provide capital to start-up firms in growing industries and how private equity markets provide capital to help established medium-sized firms (often family businesses) grow and restructure. Focuses on how financial, legal, and economic issues are dealt with in the financial contracts between venture capitalists and their limited partners and between capitalists (or other private equity investors) and the firms in which they invest.

Restricted to BMGT majors and #BU03 minors.

0101	Michael Padhi MW 8:00am - 9:15am	Seats (Total: 40) VMH 1335

BMGT366 **Growth Strategies for Emerging Companies**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT461 or BMGT361. Restriction: Junior standing or higher.

Offers practical management tools that are needed to build a new venture into a significant enterprise. The competencies, strategies and structures of successful high performance businesses are studied through cases, videos and guest lecturers. Topics include leadership, internal growth strategies, merger, acquisition and franchising.

Restricted to Innovation and Entrepreneurship Minors and Management Majors.

0101	David Kressler W 2:00pm - 3:15pm M 2:00pm - 3:15pm	Seats (Total: 60) TWS 1100 ONLINE

BMGT367 Career Search Strategies in Business

Credits: 1 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

An overview and opportunity to practice job search skills critical to obtaining internships and full-time positions. Course will cover strategies for exploring career options, preparing job search materials, development of job search skills such as interviewing and networking. Students are encouraged to take this course in the sophomore or junior year.

Restricted to BMGT students with 45 credit hours completed.

0101	Rachel Cotton, Erin Saddler M 5:00pm - 5:50pm	Seats (Total: 50) VMH 1212
0201	Meghan Houston, Erin Saddler Tu 5:00pm - 5:50pm	Seats (Total: 50) VMH 1412
0301	Erin Saddler, Lawrence Silver W 5:00pm - 5:50pm	Seats (Total: 50) VMH 1212
0401	Elmer Cherry, Erin Saddler Th 5:00pm - 5:50pm	Seats (Total: 50) VMH 1520
0501	Erin Saddler, Rachel Cotton M 6:00pm - 6:50pm	Seats (Total: 50) VMH 1412

BMGT367F Career Search Strategies in Business

Credits: 1 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

An overview and opportunity to practice job search skills critical to obtaining internships and full-time positions. Course will cover strategies for exploring career options, preparing job search materials, development of job search skills such as interviewing and networking. Students are encouraged to take this course in the sophomore or junior year.

Restricted to students in the Smith School's Smith Start Program (FPFF).

FP01	Michelle Morrison, Erin Saddler M 5:00pm - 5:50pm	Seats (Total: 42) VMH 1206
FP02	Dina Broydo, Erin Saddler M 6:00pm - 6:50pm	Seats (Total: 42) VMH 1206
FP03	Susan Powell, Erin Saddler Tu 5:00pm - 5:50pm	Seats (Total: 42) VMH 1335
FP04	Erin Saddler, Susan Powell Tu 6:00pm - 6:50pm	Seats (Total: 42) VMH 1335
FP05	Allyson Yawman, Erin Saddler W 5:00pm - 5:50pm	Seats (Total: 42) VMH 1206
FP06	Erin Saddler, Michael Poerksen W 5:00pm - 5:50pm	Seats (Total: 42) VMH 1412
FP07	Erin Saddler, Haley Snyder W 6:00pm - 6:50pm	Seats (Total: 42) VMH 1412
FP08	Anthony Jablonoski, Erin Saddler Th 5:00pm - 5:50pm	Seats (Total: 42) VMH 1412
FP09	Anthony Jablonoski, Erin Saddler Th 6:00pm - 6:50pm	Seats (Total: 42) VMH 1412
FP10	Judith Goldman, Erin Saddler Th 5:00pm - 5:50pm	Seats (Total: 42) VMH 1418
FP11	Erin Saddler, Linda Bowers W 6:00pm - 6:50pm	Seats (Total: 42) VMH 1206

FP12	Erin Saddler, Julie Reahl M 5:00pm - 5:50pm	Seats (Total: 42) VMH 1412

BMGT369D **Experiential Learning in Business Innovation and Entrepreneurship; Ladies First Founders**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Selected experiential learning opportunities in business innovation and entrepreneurship

0101	Sara Herald Tu 3:30pm - 4:45pm	Seats (Total: 10) VMH 2333D

BMGT370 **Introduction to Transportation**

Credits: 3 Grading Method: Regular

An overview of the transportation field with an emphasis on freight movements from the perspective of both providers of capacity and users of freight services. Examines the characteristics of the freight modes and the role of each mode as a major component of logistics and supply chain management. Explores the economics, energy use, and finances of each mode as well as the impact of government policies on each mode's future. Discussion of infrastructure and capacity needs of the transportation system and its ability to support the economy.

Restricted to BMGT students with 53 credit hours completed.

0101	Leland Gardner MW 8:00am - 9:15am	Seats (Total: 35) VMH 1336
0201	Leland Gardner MW 9:30am - 10:45am	Seats (Total: 35) VMH 1336

BMGT372 **Introduction to Logistics and Supply Chain Management**

Credits: 3 Grading Method: Regular

Supply chain management involves the coordination of suppliers, manufacturers, distributors, and retailers to ensure that products and services are available to the final consumer in a timely and cost-effective fashion. Logistics management is the subset of supply chain management dealing with the physical flows of product and includes such activities as transportation management, warehousing, materials handling, inventory management, and order fulfillment. Attention is paid to the logistics cost trade-offs within the firm and between members of the supply chain.

0101	Niratcha Tungtisanont TuTh 9:30am - 10:45am *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 40) VMH 1336
0201	Niratcha Tungtisanont TuTh 12:30pm - 1:45pm *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 40) VMH 1303
0301	Humberto Coronado MW 2:00pm - 3:15pm *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 40) VMH 1411
0401	Humberto Coronado MW 3:30pm - 4:45pm *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 40) VMH 1411
SG91	Richard Hutchins MW 11:00am - 12:15pm *Restricted to Junior BMGT-Shady Grove cohort students majoring in Management and Marketing. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 50) BLD3 4230

BMGT380 **Business Law I**

Credits: 3 Grading Method: Regular

Legal aspects of business relationships. Examination of torts and business crimes, contracts and agency. The law of personal property and bailment relationships. Survey of public policy issues.

Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT380N.

0101	Burt Leete MW 9:30am - 10:45am	Seats (Total: 55) VMH 1202
0201	Burt Leete MW 11:00am - 12:15pm	Seats (Total: 52) VMH 1202
0301	Richard Daniels MW 3:30pm - 4:45pm	Seats (Total: 60) VMH 1412

0401	Gideon Mark TuTh 11:00am - 12:15pm	Seats (Total: 60) VMH 1303
0501	Gideon Mark TuTh 2:00pm - 3:15pm	Seats (Total: 60) VMH 1412
0601	Jennifer Gershberg TuTh 9:30am - 10:45am	Seats (Total: 60) VMH 1303

BMGT380H **Business Law I**

(Perm req)

Credits: 3 Grading Method: Regular

Legal aspects of business relationships. Examination of torts and business crimes, contracts and agency. The law of personal property and bailment relationships. Survey of public policy issues.

Restricted to BMGT Honors students with 53 credit hours completed.

0101	Justin Reyna MW 3:30pm - 4:45pm *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 35) VMH 1418

BMGT380N **Business Law I**

Credits: 3 Grading Method: Regular

Legal aspects of business relationships. Examination of torts and business crimes, contracts and agency. The law of personal property and bailment relationships. Survey of public policy issues.

Restricted to Agricultural and Resource Economics (0111C) majors with 53 credit hours completed.

0201	Burt Leete MW 11:00am - 12:15pm	Seats (Total: 3) VMH 1202

BMGT381 **Business Law II**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT380; or permission of BMGT-Robert H. Smith School of Business.

The Uniform Commercial Code, including sales, commercial paper, secured transactions, bulk sales and documents of title. The law of partnerships and corporations. Reorganization and liquidation under the bankruptcy laws. The law of real property, landlord and tenant relationships and decedents' estates.

Restricted to BMGT majors with 63 credit hours completed.

0101	Justin Reyna MW 5:00pm - 6:15pm	Seats (Total: 50) VMH 1418

BMGT382 **Marketing and Innovation for Entrepreneurs**

Credits: 3 Grading Method: Regular

Restriction: Must not have completed BMGT352. Credit only granted for: BMGT352 or BMGT382. Additional information: Course will not satisfy a Marketing major requirement.

Marketing and Innovation are two critically important activities that determine success in any business venture. This course will focus on understanding the fundamentals of marketing and innovation from the perspective of an entrepreneur. At a broad level, we will apply proven marketing frameworks (STP and 4Ps) to effectively deliver innovation in an entrepreneurial context.

Restricted to Innovation and Entrepreneurship minors.

0101	Mary Beth Furst TuTh 9:30am - 10:45am	Seats (Total: 40) SQH 1119

BMGT385 **Operations Management**

Credits: 3 Grading Method: Regular

Credit only granted for: BMGT385 or ENME426.

Studies the design, management and improvement of a firm's processes an systems for creation and delivery of products and services. Includes strategic and operational views of supply chain, product development, and capacity analysis, highlighting the competitive advantages that operations management can provide the firm.

Restricted to BMGT majors and QUEST program students with 53 credit hours completed.

0101	Kazim Ruhi TuTh 12:30pm - 1:45pm	Seats (Total: 45) VMH 1335
0201	Kazim Ruhi TuTh 9:30am - 10:45am	Seats (Total: 45) VMH 1411

BMGT390H **Systems Thinking for Managerial Decision Making**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES190 or BMGT190. Restriction: Must be in the QUEST program. Also offered as: ENES390. Credit only granted for: BMGT390 or ENES390.

QUEST students develop an understanding of complex systems that incorporate elements of business and technical design and analyze how these systems evolve over time and may be shaped by technology disruptions, internal decisions, and external forces. Students apply these concepts to real-world complex systems in a team environment.

Restricted to QUEST program students. Also offered as ENES390H. Credit granted for ENES390H or BMGT390H.

0101	Joseph Bailey TuTh 3:30pm - 4:45pm	Seats (Total: 50) ESJ 1215

BMGT392 Introduction to International Business Management

Credits: 3 Grading Method: Regular

Prerequisite: ECON200.

A study of the domestic and foreign environmental factors affecting the international operations of U.S. business firms. The course also covers the administrative aspects of international marketing, finance and management.

0101	Roxanne Jaffe TuTh 8:00am - 9:15am *Restricted to BMGT majors with 53 credit hours completed.*	Seats (Total: 40) VMH 1412
SG91	Richard Hutchins MW 12:30pm - 1:45pm *Restricted to Junior BMGT-Shady Grove students majoring in Management, and Marketing. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove*	Seats (Total: 50) BLD3 4230

BMGT397 Mentoring Design and Quality Teams

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Restricted to QUEST Program (TQMP) students. Also offered as: ENES397. Credit only granted for: BMGT397 or ENES397.

QUEST students practice essential skills for mentoring and coaching multidisciplinary teams. These include effective communications, facilitation, conflict resolution, and the ability to motivate. Students will practice these skills as mentors for student teams from BMGT/ENES 190H. In the process, they will strengthen their knowledge of design and quality techniques.

Restricted to students in the QUEST program. Also listed as ENES397. Credit granted for BMGT397 or ENES397.

0101	Pamela Armstrong Tu 5:00pm - 7:40pm	Seats (Total: 10) VMH 1415

BMGT398 **Individual Study in Business and Management**

(Perm req)

Credits: 1-3 Grading Method: Regular

Contact department for information to register for this course.

BMGT398A **Individual Study in Business and Management; Internship**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Restricted to Smith School of Business students. Interested students should contact Erin Fields Saddler (BMGT398A@rhsmith.umd.edu) for details and permission.

0101	Erin Saddler Contact instructor or department for details.	Seats (Total: 30)
SG91	Erin Saddler Contact instructor or department for details.	Seats (Total: 15)

BMGT398E **Individual Study in Business and Management; Maryland Social Entrepreneur Corps I**

Credits: 2 Grading Method: Regular

Also offered as AMST398Z. Credit granted for BMGT398E or AMST398Z. Restricted to students participating in the Maryland Social Entrepreneur Corps program. Participating students will be automatically enrolled in the course by Education Abroad. For more information about the program, please contact Jennifer Precht in Education Abroad (jprecht@umd.edu).

Contact department for information to register for this course.

BMGT398J **Individual Study in Business and Management; Preparing for a Global Internship**

(Perm req)

Credits: 1 Grading Method: Regular

Contact department for information to register for this course.

BMGT398L **Individual Study in Business and Management; Innovo Consulting Practicum: Innovate Business Processes**

(Perm req)

Credits: 3 Grading Method: Regular

Contact department for information to register for this course.

BMGT398W **Individual Study in Business and Management; Junior Wall Street Fellows**

Credits: 1 Grading Method: Regular

Restricted to junior Wall Street Fellows.

0101	Julie Pavlovsky Th 12:30pm - 1:45pm	Seats (Total: 22) VMH 1415	

BMGT402 Database Systems

Credits: 3 Grading Method: Regular

Recommended: BMGT302. Credit only granted for: INST327 or BMGT402.

The fundamentals of database management systems (DBMS), data models, query processing, and data warehouses, and their application in the development of business information systems will be covered. An important goal of this course is to understand the value of information resources and information management challenges within an organization.

Restricted to BMGT majors and Business Analytics minors with 72 credit hours completed.

0101	Mikhail Lysyakov TuTh 2:00pm - 3:15pm Th 5:00pm - 5:50pm	Seats (Total: 38) VMH 2203 VMH 2203	 Lab
0201	Woei-Jyh Lee MW 8:00am - 9:15am Tu 5:00pm - 5:50pm	Seats (Total: 38) VMH 2203 VMH 2203	 Lab

BMGT402F Database Systems

Credits: 3 Grading Method: Regular

Recommended: BMGT302. Credit only granted for: INST327 or BMGT402.

The fundamentals of database management systems (DBMS), data models, query processing, and data warehouses, and their application in the development of business information systems will be covered. An important goal of this course is to understand the value of information resources and information management challenges within an organization.

Restricted to students in the Technology and Business Transformation Fel lows (FPTT).

FP01	Louiqa Raschid TuTh 12:30pm - 1:45pm Th 6:00pm - 6:50pm	Seats (Total: 30) VMH 2203 VMH 2203	 Lab

BMGT403 Systems Analysis and Design

Credits: 3 Grading Method: Regular

Prerequisite: BMGT301; or students who have taken courses with comparable content may contact the department. Recommended: BMGT302.

Techniques and tools applicable to the analysis and design of computer-based information systems. System life cycle, requirements analysis, logical design of databases and performance evaluation. Emphasis on case studies. Project required that involves the design, analysis and implementation of an information system.

Restricted to BMGT majors with 72 credit hours completed.

0101	Hassan Ibrahim MW 12:30pm - 1:45pm	Seats (Total: 38) VMH 2203
0201	John Sammarco Tu 7:00pm - 9:40pm	Seats (Total: 38) VMH 1307

BMGT404 Essential Data Skills for Business Analytics

Credits: 3 Grading Method: Regular

Prerequisite: BMGT301.

Understand the principles of data science and business analytics to collect, analyze and visualize business data. Students will learn the use of industry standard software with applications in finance, accounting, marketing and operations.

Restricted to BMGT majors and Business Analytics minors with 72 credit hours completed.

0101	Wei Chen MW 12:30pm - 1:45pm	Seats (Total: 25) VMH 3522
0201	Wei Chen MW 2:00pm - 3:15pm	Seats (Total: 35) VMH 2203
0301	Wei Chen M 7:00pm - 9:40pm	Seats (Total: 35) VMH 2203

BMGT407 Information Systems Projects

Credits: 3 Grading Method: Regular

Prerequisite: BMGT402 and BMGT403. Restriction: Senior standing.

Senior capstone course for the decision and information sciences major. Collected knowledge from the DIS courses and application to significant problems of size and complexity. State-of-the-art research ideas and current business and industrial practices in information systems.

Restricted to Information Systems majors with 86 credit hours completed.

0101	Hassan Ibrahim MW 11:00am - 12:15pm	Seats (Total: 40) VMH 2203
0201	Hassan Ibrahim W 7:00pm - 9:40pm	Seats (Total: 40) VMH 2203
0301	Hassan Ibrahim TuTh 3:30pm - 4:45pm	Seats (Total: 40) VMH 2203
0401	Hassan Ibrahim Th 7:00pm - 9:40pm	Seats (Total: 40) VMH 2203

BMGT408C **Emerging Topics in Information Systems; Quality Web Development in Business**

Credits: 3 Grading Method: Regular

Selected advanced topics covering emerging developments in the field of decision and information technologies.

Restricted to QUEST program students.

0101	James Purtilo, Daniel Laurence Th 5:00pm - 7:40pm	Seats (Total: 20) VMH 3330H

BMGT408V **Emerging Topics in Information Systems; Data Visualization and Web Analytics**

Credits: 3 Grading Method: Regular

Selected advanced topics covering emerging developments in the field of decision and information technologies.

Prerequisite: BMGT301; BMGT302 Recommended. Restricted to Information Systems majors (0702B) with 72 credit hours completed.

0101	Wei Chen TuTh 11:00am - 12:15pm	Seats (Total: 20) VMH 1518

BMGT410 **Government Accounting**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

An introduction to the theory and practice of accounting and financial reporting as applied in both federal and state/local governments, with a focus on generally accepted accounting principles applicable in each. Topics include analyzing transactions; recognizing transactions in the accounting cycles; and preparing and analyzing financial statements and the overall financial reports at both the federal and state/local government levels.

Restricted to Accounting majors with 60 credit hours completed.

0101	Gary Bulmash TuTh 11:00am - 12:15pm	Seats (Total: 40) VMH 1411

BMGT411 Ethics and Professionalism in Accounting

Credits: 3 Grading Method: Regular

Prerequisite: BMGT311. Restriction: Must be in Accounting program.

Analysis and discussion of issues relating to ethics and professionalism in accounting.

0101	Emanuel Zur MW 9:30am - 10:45am *Restricted to Accounting majors with 86 credit hours completed.*	Seats (Total: 35) VMH 1518
0201	Emanuel Zur MW 11:00am - 12:15pm *Restricted to Accounting majors with 86 credit hours completed.*	Seats (Total: 35) VMH 1518
0301	Emanuel Zur MW 12:30pm - 1:45pm *Restricted to Accounting majors with 86 credit hours completed.*	Seats (Total: 35) VMH 1518
SG91	Thomas Kelley MW 9:30am - 10:45am *Restricted to Senior BMGT-Shady Grove students majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 35) BLD2 2052

SG92	Thomas Kelley	Seats (Total: 35)
	MW 11:00am - 12:15pm	BLD2 2052
	Restricted to Senior BMGT-Shady Grove students majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

BMGT417 **Taxation of Corporations, Partnerships and Estates**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

Federal taxation of corporations using the life-cycle approach-formation, operation, assessment, merger, reorganization and liquidation. Overviews of pass-through entities - partnerships and s-corporations -using the life-cycle approach, and the tax consequences of wealth transfers by individuals - gift and estate taxation. Both tax planning and compliance issues are addressed.

0101	Thomas Kelley	Seats (Total: 40)
	MW 5:00pm - 6:15pm	VMH 1411
	Restricted to Accounting majors with 84 credit hours completed.	
SG91	Jeffrey Milton	Seats (Total: 35)
	MW 12:30pm - 1:45pm	BLD2 3012
	Restricted to Senior BMGT-Shady Grove students majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	
SG92	Jeffrey Milton	Seats (Total: 35)
	MW 2:00pm - 3:15pm	BLD2 3012
	Restricted to Senior BMGT-Shady Grove students majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

BMGT422 **Auditing Theory and Practice**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT310; and must have completed or be concurrently enrolled in BMGT311.

A study of the independent accountant's attest function, generally accepted auditing standards, compliance and substantive tests and report forms and opinions.

Restricted to Accounting majors.

0101	Mary Keim TuTh 3:30pm - 4:45pm	Seats (Total: 30) VMH 1311
0201	James McKinney MW 12:30pm - 1:45pm	Seats (Total: 30) VMH 1307
0301	James McKinney MW 2:00pm - 3:15pm	Seats (Total: 30) VMH 1307

BMGT423 Fraud Examination

Credits: 3 Grading Method: Regular

Prerequisite: BMGT310.

Covers fraud prevention, detection and investigation techniques. The traditional accounting areas of fraud-fraudulent financial accounting and misappropriation of assets as well as recent and historical cases of fraud will also be examined. Current fraud topics will be discussed.

Restricted to Accounting majors with 60 hours credit hours completed.

0101	Sandra Rose TuTh 9:30am - 10:45am	Seats (Total: 40) VMH 1307
0201	Sandra Rose TuTh 11:00am - 12:15pm	Seats (Total: 40) VMH 1307

BMGT424 Advanced Accounting

Credits: 3 Grading Method: Regular

Prerequisite: BMGT311.

Advanced accounting theory applied to specialized topics and current problems. Emphasis on consolidated statements and partnership accounting.

Restricted to Accounting majors.

0101	Samuel Handwerger TuTh 12:30pm - 1:45pm	Seats (Total: 35) VMH 1518

BMGT430 Data Modeling in Business

Credits: 3 Grading Method: Regular

Prerequisite: BMGT231 or BMGT230; or permission of BMGT-Robert H. Smith School of Business.

Explores the role of statistical models in business analytics to drive managerial decision-making and improve performance through the use of relevant data-motivated examples. Topics include regression models (both simple and multiple regression, as well as logistic regression for binary data), model validation, variable transformation, variable selection, discriminant analysis, and forecasting. These topics are modeled using state-of-the-art data analytics software.

Restricted to BMGT majors with 72 credit hours completed or Business Analytics minors.

0101	Radu Lazar MW 11:00am - 12:15pm	Seats (Total: 50) VMH 1336
0201	Radu Lazar MW 5:00pm - 6:15pm	Seats (Total: 50) VMH 1336

BMGT431 **Data Analytics**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT430.

An introduction to the tools and techniques that are central to the analysis of abundant data that is being collected in many forms including web traffic, social network data, and reviews and comments on websites.

Restricted to Business Analytics minors or OM majors.

0101	Radu Lazar MW 9:30am - 10:45am	Seats (Total: 40) VMH 1415
0201	Radu Lazar MW 3:30pm - 4:45pm	Seats (Total: 40) VMH 1336
0301	Radu Lazar TuTh 11:00am - 12:15pm	Seats (Total: 40) VMH 1311

BMGT434 **Analytics Consulting: Cases and Projects**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT332; and (MATH120 or MATH140; or must have completed MATH220). Or students who have taken courses with comparable content may contact the department. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

This course assumes that students have already been introduced to the concepts and techniques of operations research/business analytics (OR/BA). Published papers, short cases, and projects in OR/BA will be analyzed and discussed in a thoughtful way, taking into account the soft (people-related) issues and the hard (mathematical/optimization) issues.

Restricted to Business majors, QUEST Program students, and Business Analytic minors with 72 credit hours completed.

0101	Bruce Golden	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	VMH 1418

BMGT435 Business Process Simulation

Credits: 3 Grading Method: Regular

Prerequisite: BMGT231 or BMGT230; or students who have taken courses with comparable content may contact the department. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Develop and plan simulation studies, build simulation models with special purpose software, analyze and interpret the results. Extensive use of applications and real-world examples. The emphasis is on model formulation and the interpretation of results, rather than mathematical theory.

Restricted to BMGT majors and Business Analytics minors with 60 credit hours completed.

0101	Sujin Kim	Seats (Total: 45)
	TuTh 9:30am - 10:45am	VMH 1520

BMGT438A Special Topics in Operations Management; Applied Quantitative Analysis

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected advanced topics in operations management.

Restricted to QUEST students. Also offered as ENES498A. Credit granted for BMGT438A or ENES489A.

0101	David Ashley, Joshua Kohn	Seats (Total: 12)
	M 5:00pm - 7:40pm	VMH 1326

BMGT438G Special Topics in Operations Management; Design and Innovation in Silicon Valley

Credits: 3 Grading Method: Regular

Selected advanced topics in operations management.

Also offered as ENES489Q. Credit granted for BMGT438G or ENES489Q. Travel to Silicon Valley during Spring Break required of all class participants. Restricted to Quest program students

0101	Jessica Roffe Th 7:45pm - 8:45pm Contact instructor or department for details.	Seats (Total: 15) VMH 1415

BMGT440 **Advanced Financial Management**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340.

Analysis and discussion of cases and readings relating to financial decisions of the firm. The application of finance concepts to the solution of financial problems is emphasized.

Restricted to BMGT majors with 68 credit hours completed.

0101	David Kass TuTh 11:00am - 12:15pm	Seats (Total: 50) VMH 1336
0201	David Kass TuTh 2:00pm - 3:15pm	Seats (Total: 50) VMH 1335
0301	David Kass TuTh 3:30pm - 4:45pm	Seats (Total: 50) VMH 1335

BMGT440F **Advanced Financial Management**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340.

Analysis and discussion of cases and readings relating to financial decisions of the firm. The application of finance concepts to the solution of financial problems is emphasized.

Restricted to students in the Smith School's Emerging CFO's Fellows program.

FP01	Susan White, Karen Hallows MW 11:00am - 12:15pm	Seats (Total: 35) VMH 1415

BMGT441 **Fixed Income**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340. Credit only granted for: BMGT448A or BMGT441. Formerly: BMGT448A.

Describes important financial instruments which have market values that are sensitive to interest rate movements. Develops tools to analyze interest rate sensitivity and value fixed income securities. Defines and explains the vocabulary of the bond management business.

Restricted to Finance majors with 72 credit hours completed.

0101	Aysun Alp MW 3:30pm - 4:45pm	Seats (Total: 45) VMH 1307
0201	Aysun Alp MW 5:00pm - 6:15pm	Seats (Total: 45) VMH 1307
0301	Aysun Alp MW 12:30pm - 1:45pm	Seats (Total: 45) VMH 1520

BMGT442F **Advanced Portfolio Management**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT343. Credit only granted for: BMGT442 or BMGT448C. Formerly: BMGT448C.

An in-depth coverage of statistical methods for choosing stocks is provided. Financial markets data is used in the class. Students are also expected to learn and use Matlab during the class to implement the concepts of the class.

Restricted to Quantitative Finance Fellows (FPQF).

FP01	Russell Wermers MW 12:30pm - 1:45pm	Seats (Total: 44) VMH 1411

BMGT443 **Applied Equity Analysis and Portfolio Management**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT343.

Study and application of the concepts, methods, models, and empirical findings to the analysis, valuation and selection of securities, especially common stock.

Restricted to BMGT majors with 84 credit hours completed.

0101	Joseph Perfetti MW 11:00am - 12:15pm	Seats (Total: 45) VMH 3505

0201	Joseph Perfetti MW 12:30pm - 1:45pm	Seats (Total: 45) VMH 3505
0301	Joseph Perfetti MW 2:00pm - 3:15pm	Seats (Total: 45) VMH 3505
0401	Joseph Perfetti MW 3:30pm - 4:45pm	Seats (Total: 45) VMH 3505

BMGT444 **Futures and Options Contracts**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT343. Credit only granted for: BMGT444 or MATH424.

The institutional features and economic rationale underlying markets in futures and options. Hedging, speculation, structure of futures prices, interest rate futures, efficiency in futures markets and stock and commodity options.

Restricted to Finance majors with 84 credit hours completed.

0101	Rajeev Bhattacharya TuTh 5:00pm - 6:15pm	Seats (Total: 45) VMH 1206
0201	Rajeev Bhattacharya TuTh 9:30am - 10:45am *Course res to Finance majors (0503F) with 84+ credits*	Seats (Total: 45) VMH 1418

BMGT445 **Banking and Financial Institutions**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340. Recommended: ECON330 or BMGT341.

Analysis and discussion of cases and readings in commercial bank management. The loan function is emphasized; also the management of liquidity reserves, investments for income and source of funds. Bank objectives, functions, policies, organization, structure, services and regulation are considered.

Restricted to Finance majors with 84 credit hours completed.

0101	Elinda Kiss MW 9:30am - 10:45am	Seats (Total: 48) VMH 1335

0201	Elinda Kiss MW 11:00am - 12:15pm	Seats (Total: 48) VMH 1335
0301	Elinda Kiss MW 3:30pm - 4:45pm	Seats (Total: 48) VMH 1335

BMGT445F **Banking and Financial Institutions**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340. Recommended: ECON330 or BMGT341.

Analysis and discussion of cases and readings in commercial bank management. The loan function is emphasized; also the management of liquidity reserves, investments for income and source of funds. Bank objectives, functions, policies, organization, structure, services and regulation are considered.

Restricted to students in the Banking and Private Wealth Management Fellows program.

FP01	Elinda Kiss MW 2:00pm - 3:15pm	Seats (Total: 35) VMH 1335

BMGT446 **International Finance**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340.

Financial management from the perspective of the multinational corporation. Topics covered include the organization and functions of foreign exchange and international capital markets, international capital budgeting, financing foreign trade and designing a global financing strategy. Emphasis of the course is on how to manage exchange and political risks while maximizing benefits from global opportunity sets faced by the firm.

0101	Sylvain Delalay TuTh 3:30pm - 4:45pm *Restricted to Finance and International Business majors with 72 credit hours completed.*	Seats (Total: 45) VMH 1307
0201	Stefano Collina TuTh 11:00am - 12:15pm *Restricted to Finance and International Business majors with 72 credit hours completed.*	Seats (Total: 45) VMH 1418
0301	Sylvain Delalay TuTh 2:00pm - 3:15pm *Restricted to Finance and International Business majors with 72 credit hours completed.*	Seats (Total: 45) VMH 1411

0401	Sylvain Delalay	Seats (Total: 45)
	TuTh 5:00pm - 6:15pm	VMH 1307
	Restricted to Finance and International Business majors with 72 credit hours completed.	

BMGT448V **Special Topics in Finance; Text Mining for Economics and Finance**

Credits: 3 Grading Method: Regular

Selected advanced topics in finance.

Restriction: Finance majors with 60 or more credits completed. Final Exam tba by instructor.

0101	Paul Soto	Seats (Total: 40)
	W 7:00pm - 9:40pm	VMH 1336

BMGT449F **Investment Fund Management: Lemma Senbet Fund; Investment Fund Management**

Credits: 3 Grading Method: Regular

The Lemma Senbet Fund is a year-long, advanced finance course available to undergraduate finance majors in their senior year. Ten to twelve students will be selected in the spring of their junior year to participate on the fund, two as portfolio managers and eight to ten as equity analysts. The course provides students with the opportunity to apply what they have learned in finance classes to actual investment decisions, through researching real companies and managing a portfolio of real money.

Restricted to students in the Smith School's Lemma Senbet Fund Fellows program.

FP01	Sarah Kroncke	Seats (Total: 12)
	TuTh 12:00pm - 1:50pm	VMH 2509

BMGT450 **Integrated Marketing Communications**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business. Credit only granted for: BMGT354 or BMGT450. Formerly: BMGT354.

In-depth study of coordinated marketing activities including advertising, sales promotion, Internet marketing, direct marketing and personal selling. Emphasizes strategic planning to effectively use these promotional tools to communicate with customers and meet marketing goals. Blends theory and current practice to provide managerial orientation.

0101	Christine Schaaf	Seats (Total: 45)
	TuTh 3:30pm - 4:45pm	VMH 1336
	Restricted to BMGT majors with 60 credit hours completed.	

SG91	Katherine Boyle TuTh 9:30am - 10:45am	Seats (Total: 45) BLD2 2062
	Restricted to Senior BMGT-Shady Grove BMGT-Shady Grove cohort students. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

BMGT451 Consumer Analysis

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350. Recommended: PSYC100; and PSYC221.

Identifying buyer behavior concepts relevant to a specific marketing problem so that appropriate marketing decisions can be made. Conceptual frameworks are drawn from psychology, sociology, economics, and other social sciences to aid in understanding the behavior of ultimate and industrial buyers.

0101	Ali Faraji-Rad TuTh 9:30am - 10:45am	Seats (Total: 50) VMH 1335
	Restricted to Marketing majors with 68 credit hours completed.	
0201	Ali Faraji-Rad TuTh 11:00am - 12:15pm	Seats (Total: 50) VMH 1335
	Restricted to Marketing majors with 68 credit hours completed.	
SG91	Marjorie Bonavia TuTh 11:00am - 12:15pm	Seats (Total: 50) BLD2 2062
	Restricted to Senior BMGT-Shady Grove students majoring in Internationa Business and Junior BMGT-Shady Grove students majoring in Marketing. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

BMGT452 Marketing Research Methods

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350 and BMGT230.

Focuses on aiding marketing decision-making through exploratory, descriptive and casual research. Develops student skills in designing market research studies, including selection of data collection method, development of data collection instrument, sample design, collection and statistical analysis of data and reporting the results.

Restricted to Marketing majors with 72 credit hours completed.

0101	Xian Gu MW 3:30pm - 4:45pm	Seats (Total: 35) VMH 1518
0201	Bruno Jacobs MW 9:30am - 10:45am	Seats (Total: 35) VMH 1307
0301	Bruno Jacobs MW 11:00am - 12:15pm	Seats (Total: 35) VMH 1307

BMGT454 **Global Marketing**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350.

Marketing functions from the global executive's viewpoint, including coverage of global marketing policies relating to product adaptation, data collection and analysis, channels of distribution, pricing, communications and cost analysis. Consideration is given to the cultural, legal, financial and organizational aspects of global marketing.

Restricted to BMGT majors with 72 credit hours completed.

0101	M Fardanesh MW 2:00pm - 3:15pm	Seats (Total: 45) VMH 1418
0201	M Fardanesh MW 12:30pm - 1:45pm	Seats (Total: 45) VMH 1418
EA12	Isatta Mansaray Contact instructor or department for details.	Seats (Total: 0)
SA29	Malik Blue Contact instructor or department for details.	Seats (Total: 0)

BMGT455 **Sales Management**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350.

The roles of the sales executive as a planner, manager of resources and marketing functions and recruiter, trainer, motivator and leader of field sales personnel. Techniques and sequence of problem analysis for selling and sales management decisions and to the practical framework in which these decisions take place. Teaching vehicles feature strong classroom interactions, cases, journal articles, research findings, guest sales managers, debates, and modern company practices.

Restricted to Senior BMGT-Shady Grove cohort students majoring in Marketing. Other students may request enrollment on a space available basis. UMCP undergraduate students are not eligible to enroll at Shady Grove.

SG91	Kathleen Kelly TuTh 11:00am - 12:15pm	Seats (Total: 40) BLD2 3012

BMGT457 **Marketing Policies and Strategies**

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: BMGT350.

This capstone course ties together various marketing concepts using the fundamentals of strategic market planning as the framework. Application of these principles is accomplished by analyzing and discussing cases and by playing a marketing strategy computer simulation game. Analysis of current business articles to understand the link between theory and real-world problem solving.

0101	Janet Wagner MW 11:00am - 12:15pm *Restricted to Marketing majors with 100 credit hours completed.*	Seats (Total: 45) VMH 1418
0201	Roland Rust MW 2:00pm - 3:15pm *Restricted to Marketing majors with 100 credit hours completed.*	Seats (Total: 45) VMH 1336
0301	Roland Rust MW 12:30pm - 1:45pm *Restricted to Marketing majors with 100 credit hours completed.*	Seats (Total: 45) VMH 1336
SG91	Elie Ashery MW 9:30am - 10:45am *Restricted to Senior BMGT-Shady Grove students majoring in Marketing. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 35) BLD2 3022

BMGT458C **Special Topics in Marketing; Managing Services**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected advanced topics in marketing.

Contact department for information to register for this course.

BMGT461 **Entrepreneurship**

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must not have completed BMGT361. Credit only granted for: BMGT261, BMGT361, BMGT461, ENES460 or HLMN470.

Process of creating new ventures, including evaluating the entrepreneurial team, the opportunity and the financing requirements. Skills, concepts, mental attitudes and knowledge relevant for starting a new business.

Restricted to BMGT majors with 72 credit hours completed. Non-majors should register for BMGT461N. BMGT minors should register for BMGT461M.

0101	David Kressler W 5:00pm - 7:40pm	Seats (Total: 15) VMH 1314
0201	David Kressler MW 12:30pm - 1:45pm	Seats (Total: 40) VMH 1303

BMGT461M **Entrepreneurship**

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must not have completed BMGT361. Credit only granted for: BMGT261, BMGT361, BMGT461, ENES460 or HLMN470.

Process of creating new ventures, including evaluating the entrepreneurial team, the opportunity and the financing requirements. Skills, concepts, mental attitudes and knowledge relevant for starting a new business.

Restricted to Innovation & Entrepreneurship Minors.

0101	David Kressler TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 60) TWS 1100 ONLINE

BMGT461N **Entrepreneurship**

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must not have completed BMGT361. Credit only granted for: BMGT261, BMGT361, BMGT461, ENES460 or HLMN470.

Process of creating new ventures, including evaluating the entrepreneurial team, the opportunity and the financing requirements. Skills, concepts, mental attitudes and knowledge relevant for starting a new business.

Open to all non-BMGT majors with 72 credit hours completed. BMGT majors should register for BMGT 461. Not open to Innovation and Entrepreneurship minors.

0101	David Kressler W 5:00pm - 7:40pm	Seats (Total: 20) VMH 1314

BMGT463 **Cross-cultural Challenges in Business**

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Examines in depth the nature of international cultural value-differences and their behavioral-related effects in the workplace. Topics include decision-making and leadership styles and reactions to various work assignments and reward structures.

Restricted to International Business, Management, & Entrepreneurship majors with 72 credit hours completed.

0101	Gerald Suarez MW 3:30pm - 4:45pm	Seats (Total: 35) VMH 1314
0201	Debra Shapiro MW 2:00pm - 3:15pm	Seats (Total: 35) VMH 1314

BMGT466 **Global Business Strategy**

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Focuses on the strategic challenges that directly result from and are associated with the globalization of industries and companies. Topics include drivers of industry globalization, difference between global and multi-domestic industry, global expansion strategies, sources of competitive advantage in a global context, and coordination of a company across a global network.

Restricted to International Business, Management, and Entrepreneurship & Entrepreneurship majors (0503I, 0503G, 0503E) with 72 credit hours completed.

0101	Mark Wellman M 3:30pm - 6:10pm	Seats (Total: 55) TWS 1100

BMGT467 **Strategic Innovation and Entrepreneurship**

Credits: 3 Grading Method: Regular

Credit only granted for: BMGT467, ENES463 or HLMN472.

Provides an understanding of how innovation affects the competitive dynamics of markets, how firms can strategically manage innovation, and how firms can create and implement strategies to maximize their likelihood of success.

Restricted to Innovation and Entrepreneurship minors. Meets in-person every other week.

0101	Clarence Wesley TuTh 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 60) TWS 1100 ONLINE

BMGT468P **Special Topics in Management and Organization; Practicum in Global Business**

Credits: 3 Grading Method: Regular

Selected advanced topics in management and organization.

Restricted to students in the Smith School's Global Fellows Program.

FP01	Mark Wellman, Roy Thomason Tu 6:30pm - 9:10pm	Seats (Total: 20) VMH 1418
FP02	Mark Wellman Tu 6:30pm - 9:10pm	Seats (Total: 20) VMH 1518

BMGT468R **Special Topics in Management and Organization; Fearless Founders: New Venture Practicum**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Selected advanced topics in management and organization.

Restriction: Permission of BMGT-Robert H. Smith School of Business. Also offered as ENES498R. Credit granted for ENES498R or BMGT468R.

0101	Oliver Schlake M 5:00pm - 7:40pm	Seats (Total: 25) VMH 3330H

BMGT468T **Special Topics in Management and Organization; Creativity for Business Leaders and Entrepreneurs Outdoor Edition**

Credits: 3 Grading Method: Regular

Selected advanced topics in management and organization.

Restricted to students with 45 credit hours completed. Course requires participation in activities outside the scheduled meeting time, including site visits to Under Armour and in the outdoors.

0101	Oliver Schlake Tu 12:30pm - 1:45pm Contact instructor or department for details.	Seats (Total: 35) SQH 1101

BMGT468U **Special Topics in Management and Organization; Fearless Founders: Social Entrepreneurship Laboratory**

Credits: 3 Grading Method: Regular

Selected advanced topics in management and organization.

Restricted to students with 45 credits earned.

0101	Andrew Bewick W 7:00pm - 9:40pm	Seats (Total: 30) VMH 1411

BMGT468W **Special Topics in Management and Organization; Social Innovation Practicum: Consulting and Venture Creation**

Credits: 3 Grading Method: Regular

Selected advanced topics in management and organization.

Restricted to Social Innovation Fellows.

FP01	Anne Pellicciotto M 6:30pm - 9:10pm	Seats (Total: 23) VMH 1307

BMGT472 **Purchasing and Inbound Logistics**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT372.

Analysis of the resupply activities of logistics management, including purchasing policies, transportation planning, and inventory control. Attention is directed toward total cost minimization and the establishment of a sustainable competitive advantage based on procurement.

Restricted to Supply Chain Management majors.

0101	Philip Evers TuTh 2:00pm - 3:15pm	Seats (Total: 40) VMH 1336

BMGT476 **Technology Applications in Supply Chain Management**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT372.

An understanding of the role of technology in managing the supply chain Provides students with hands-on experience in advanced software systems that build on top of enterprise resource planning systems. Major emphasis is placed on demonstrating that these systems result in supply chain cost reductions and service improvements.

Restricted to Supply Chain Management and Information Systems majors.

0101	Hongyi Zhang MW 2:00pm - 3:15pm	Seats (Total: 24) VMH 3522
0201	Hongyi Zhang MW 3:30pm - 4:45pm	Seats (Total: 24) VMH 3522
0301	Hongyi Zhang MW 11:00am - 12:15pm	Seats (Total: 24) VMH 3522
0401	Laharish Guntuka TuTh 3:30pm - 4:45pm	Seats (Total: 24) VMH 3522

BMGT477 **International Supply Chain Management**

Credits: 3 Grading Method: Regular

The study of the importance of the supply chain management within a global context. Topics covered include: the structure, service, pricing and competitive relationships among international carriers and transport intermediaries as well as documentation, location decisions, international sourcing/distribution and management of inventory throughout the international supply chain.

0101	Adams Steven TuTh 9:30am - 10:45am *Restricted to Supply Chain Management majors and International Business majors.*	Seats (Total: 45) VMH 1206
0201	Adams Steven TuTh 11:00am - 12:15pm *Restricted to Supply Chain Management majors and International Business majors.*	Seats (Total: 45) VMH 1206

BMGT478C **Special Topics in Supply Chain Management; Supply Chain Risk Management**

Credits: 3 Grading Method: Regular

Selected advanced topics in supply chain management.

Restricted to Supply Chain Management majors.

0101	Leland Gardner MW 12:30pm - 1:45pm	Seats (Total: 45) VMH 1206

BMGT478D **Special Topics in Supply Chain Management; Applied Research in Intermodal Transportation and Logistics**

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in supply chain management.

Restricted to students in the Supply Chain Management Fellows program.

FP01	Dianne Fox, Thomas Corsi W 6:30pm - 9:10pm	Seats (Total: 35) VMH 1335

BMGT484 **Digital Marketing**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Examines the process of developing, implementing, and analyzing strategies for successfully marketing a variety of existing and potential products and services through digital means, including the web, social media, and mobile apps. Both the development and analysis of digital media for marketing will be discussed.

Restricted to BMGT majors with 60 credit hours completed.

0101	Mary Harms TuTh 11:00am - 12:15pm	Seats (Total: 45) VMH 3505
0201	Mary Harms TuTh 2:00pm - 3:15pm	Seats (Total: 45) VMH 3505
0301	Mary Harms TuTh 9:30am - 10:45am	Seats (Total: 45) VMH 3505

BMGT485 **Project Management**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT231 or BMGT230; or students who have taken courses with comparable content may contact the department. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Modern project management techniques that are used by modern practicing professionals will be covered. Particular attention is given to the management of technology based systems and projects in a business enterprise. The topics covered include: defining project scope, alignment of projects with enterprise strategy, managing project cost, time and risks using tools such as CPM/PERT, and measuring project performance.

Restricted to BMGT majors and QUEST program students with 72 credit hours completed.

0101	Maria Bardossy MW 2:00pm - 3:15pm	Seats (Total: 45) VMH 1524
0201	Maria Bardossy MW 12:30pm - 1:45pm	Seats (Total: 45) VMH 1415

BMGT490H **Quest Consulting and Innovation Practicum**

Credits: 4 Grading Method: Regular General Education: DSSP

Prerequisite: ENES390 or BMGT390. Also offered as: ENES490. Credit only granted for: BMGT490 or ENES490.

The capstone course for the QUEST Honors Program provides students with an opportunity to learn in multidisciplinary teams of business, engineering, and science students in a real-world setting. Companies engage teams of QUEST students with real organizational challenges and dedicate resources to help students address these problems. Student teams must enhance their skills in quality management, process improvement, and systems design and will apply these to add value to a client. In the process, students will improve their teamwork skills.

Restricted to QUEST program students. Also offered as ENES490H. Credit granted for ENES490H or BMGT490H.

0101	David Ashley, Christina Elson W 5:00pm - 7:40pm Contact instructor or department for details.	Seats (Total: 45) VMH 1415

BMGT491 **Defining Consulting and Innovation Projects**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: BMGT190 or ENES190. Restriction: Restricted to QUEST Program (TQMP) students. Also offered as: ENES491. Credit only granted for: BMGT491 or ENES491.

QUEST students cultivate relationships with new and current corporate partners and prepare project scopes for QUEST's introductory course, BMGT/ENES 190H, and capstone course, BMGT/ENES 490H. Requires independent work communicating with clients and class visits to a variety of potential project sites.

Restricted to QUEST program students. Also offered as ENES491. Credit granted for BMGT491 or ENES491.

0101	Jessica Roffe	Seats (Total: 9)
	Tu 9:30am - 12:15pm	VMH 1407

BMGT494H **Honors Study**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: BMGT493. Restriction: Permission of BMGT-Robert H. Smith School of Business; and must be in the Smith School Honors Fellows program.

Second semester of the senior year. The student shall continue and complete the research initiated in BMGT 493, additional reports may be required at the discretion of the faculty advisor and Assistant Dean of Undergraduate Studies.

Restricted to BMGT Honors students.

0101	Charles Olson	Seats (Total: 25)
	Contact instructor or department for details.	

BMGT495 **Strategic Management**

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A case-based course where students learn to play the role of the "strategic manager" who defines the scope of its business operations and, within the chosen scope, how the firm will compete against rivals. This course focuses on how a firm can both formulate effective business-level and corporate-level strategies to achieve competitive advantage and earn above average profits.

0101	Ralph Gibbs	Seats (Total: 40)
	MW 9:30am - 10:45am	VMH 1333
	Restricted to BMGT majors with 60 credit hours completed.	
0201	Protiti Dastidar	Seats (Total: 40)
	MW 12:30pm - 1:45pm	VMH 1202
	Restricted to BMGT majors with 60 credit hours completed.	

0301	Evan Starr MW 2:00pm - 3:15pm *Restricted to BMGT majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1202
0401	Evan Starr MW 3:30pm - 4:45pm *Restricted to BMGT majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1202
0501	Ralph Gibbs MW 5:00pm - 6:15pm *Restricted to BMGT majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1202
0601	Donna Howell TuTh 9:30am - 10:45am *Restricted to BMGT majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1202
0701	Waverly Ding TuTh 11:00am - 12:15pm *Restricted to BMGT majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1202
0801	Waverly Ding TuTh 12:30pm - 1:45pm *Restricted to BMGT majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1202
0901	Waverly Ding TuTh 2:00pm - 3:15pm *Restricted to BMGT majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1202
1001	David Kressler TuTh 3:30pm - 4:45pm *Restricted to BMGT majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1202
1101	Gregory Marr TuTh 5:00pm - 6:15pm *Restricted to BMGT majors with 60 credit hours completed.*	Seats (Total: 40) VMH 1202
SG92	Oliver Schlake MW 11:00am - 12:15pm	Seats (Total: 40) BLD2 2062

SG93	Oliver Schlake MW 12:30pm - 1:45pm	Seats (Total: 40) BLD2 2062
SG94	Qing Zhao MW 12:30pm - 1:45pm	Seats (Total: 40) BLD2 3022

Restricted to BMGT Honors students with 100 credit hours completed.

BMGT495H **Strategic Management**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A case-based course where students learn to play the role of the "strategic manager" who defines the scope of its business operations and, within the chosen scope, how the firm will compete against rivals. This course focuses on how a firm can both formulate effective business-level and corporate-level strategies to achieve competitive advantage and earn above average profits.

0101	Paulo Prochno TuTh 3:30pm - 4:45pm	Seats (Total: 35) VMH 1411

BMGT495M **Strategic Management**

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A case-based course where students learn to play the role of the "strategic manager" who defines the scope of its business operations and, within the chosen scope, how the firm will compete against rivals. This course focuses on how a firm can both formulate effective business-level and corporate-level strategies to achieve competitive advantage and earn above average profits.

Restricted to General Business minors.

0101	Protiti Dastidar MW 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 60) TYD 2109 ONLINE

BMGT496 **Business Ethics and Society**

Credits: 3 Grading Method: Regular

Prerequisite: 1 course in BMGT; or permission of BMGT-Robert H. Smith School of Business.

A study of the standards of business conduct, morals and values as well as the role of business in society with consideration of the sometimes conflicting interests of and claims on the firm and its objectives. Emphasizes a strategic approach by business to the management of its external environment.

Restricted to BMGT majors with 53 credit hours completed.

0101	Jennifer Gershberg TuTh 12:30pm - 1:45pm	Seats (Total: 40) VMH 1411

BMGT498L **Special Topics in Business and Management; Innovo Consulting Practicum: Transform Learning**

(Perm req)

Credits: 3 Grading Method: Regular

Special topics in business and management designed to meet the changing needs and interests of students and faculty.

Innovo Scholars is a new program offering an elite group of students the opportunity to particpate in the innovation of teaching and learning at Smith. In addition to completing normal teaching assistant activities, the Scholars will be responsible for designing and implementing improvements to an existing Smith course or program.

0101	Jonathan Southgate Th 5:00pm - 6:50pm Contact instructor or department for details.	Seats (Total: 10) SQH 4111
0102	Jonathan Southgate Th 5:00pm - 6:50pm Contact instructor or department for details.	Seats (Total: 10) SQH 4111

BMGT808J **Special Topics in Information Systems; Systems, Institutions, Firms and Collectives**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Information Systems doctoral field of study.

0101	Anand Gopal **Meets March 25, 2019 - May 10, 2019** Contact instructor or department for details.	Seats (Total: 12)

BMGT808K **Special Topics in Information Systems; Quality Transparency and the Value of Information**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Information Systems doctoral field of study.

0101	Guodong Gao	Seats (Total: 12)
	Meets February 1, 2019 - March 15, 2019	
	F 4:00pm - 7:30pm	VMH 4335

BMGT808R **Special Topics in Information Systems; Research Seminar in Decision, Operations and Information Technologies**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Information Systems doctoral field of study.

0101	Sivakumar Viswanathan	Seats (Total: 15)
	F 2:00pm - 3:30pm	VMH 1335

BMGT818B **Special Topics in Accounting and Information Assurance; Topics in Financial Accounting**

Credits: 3 Grading Method: Regular, Audit

Special topics specific to the Accounting and Information Assurance doctoral field of study.

0101	Rebecca Hann	Seats (Total: 12)
	W 10:00am - 1:00pm	VMH 4335

BMGT818R **Special Topics in Accounting and Information Assurance; Workshop in Accounting Research**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Accounting and Information Assurance doctoral field of study.

0101	Lawrence Gordon	Seats (Total: 12)
	Contact instructor or department for details.	

BMGT828 **Independent Study in Business and Management**

Credits: 1-9 Grading Method: Regular

Contact department for information to register for this course.

BMGT833 **Operations Research: Integer Programming**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: BMGT830; and (MATH241; or students who have taken courses with comparable content may contact the department). Or permission of BMGT-Robert H. Smith School of Business.

Theory, applications, and computational methods of integer optimization. Zero-one implicit enumeration, branch and bound methods, and cutting plane methods.

0101	Michael Ball	Seats (Total: 14)
	Th 10:00am - 12:40pm	VMH 4335

BMGT838P **Special Topics in Operations Management/Management Science; Emerging Topics in Operations Management**

Credits: 1-9 Grading Method: Regular, Audit

Special topics specific to the Operations Management/Management Science doctoral field of study.

0101	Tunay Tunca	Seats (Total: 12)
	F 1:00pm - 4:00pm	VMH 2509

BMGT838R **Special Topics in Operations Management/Management Science; Research Seminar in Decision, Operations and Information Technologies**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Operations Management/Management Science doctoral field of study.

0101	Zhi-Long Chen	Seats (Total: 15)
	F 2:00pm - 3:30pm	VMH 1335

BMGT843 **Seminar in Portfolio Theory**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of BMGT-Robert H. Smith School of Business.

Seminar in selected classic and current theoretical and empirical research in portfolio theory.

0101	Mark Loewenstein	Seats (Total: 12)
	F 1:00pm - 3:40pm	VMH 4534

BMGT848F **Special Topics in Finance; Workshop in Finance Research**

Credits: 1

Grading Method: Regular, Audit

Special topics specific to the Finance doctoral field of study.

0101	Pablo Slutzky, Maria Bustamante	Seats (Total: 12)
	F 10:00am - 12:00pm	VMH 2505

BMGT848G **Special Topics in Finance; Seminar in Hedge Funds**

Credits: 2

Grading Method: Regular, Audit

Special topics specific to the Finance doctoral field of study.

0101	Juha Joenvaeaerae	Seats (Total: 12)
	Meets January 28, 2019 - May 14, 2019	
	W 1:00pm - 3:00pm	VMH 1326

BMGT848K **Special Topics in Finance; Perspectives of Finance**

Credits: 3

Grading Method: Regular, Audit

Special topics specific to the Finance doctoral field of study.

0101	Lemma Senbet	Seats (Total: 12)
	M 1:00pm - 3:40pm	VMH 3332

BMGT848P **Special Topics in Finance; Empirical Asset Pricing**

Credits: 1

Grading Method: Regular, Audit

Special topics specific to the Finance doctoral field of study.

0101	Juha Joenvaeaerae	Seats (Total: 12)
	Meets January 28, 2019 - May 14, 2019	
	Tu 2:00pm - 4:00pm	VMH 3332

BMGT858J **Special Topics in Marketing; Structural Models**

Credits: 2

Grading Method: Regular, Audit

Special topics specific to the Marketing doctoral field of study.

0101	Liye Ma	Seats (Total: 16)
	Meets January 22, 2019 - March 11, 2019	
	W 8:30am - 12:05pm	VMH 1326

BMGT858R **Special Topics in Marketing; Marketing Research Seminar**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Marketing doctoral field of study.

0101	Bruno Jacobs	Seats (Total: 16)
	F 10:00am - 12:30pm	VMH 1415

BMGT868A **Special Topics in Organizational Behavior/Human Resource Management; Social Network Analyses Workshop**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	Vijaya Venkataramani	Seats (Total: 12)
	Meets March 25, 2019 - April 8, 2019	
	M 9:00am - 1:10pm	VMH 4534

BMGT868C **Special Topics in Organizational Behavior/Human Resource Management; Career and Professionalization Workshop in Management and Organization**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	David Waguespack	Seats (Total: 30)
	F 12:30pm - 2:00pm	VMH 2505

BMGT868D **Special Topics in Organizational Behavior/Human Resource Management; Decision Making**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	Rellie Rozin	Seats (Total: 12)
	Meets March 26, 2019 - May 7, 2019	
	Tu 9:00am - 12:35pm	VMH 4534

BMGT868J **Special Topics in Organizational Behavior/Human Resource Management; Mediation and Moderation Analyses Workshop**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	Subrahmaniam Tangirala	Seats (Total: 12)
	Meets January 28, 2019 - February 11, 2019	
	M 10:00am - 2:10pm	VMH 4534

BMGT868P **Special Topics in Organizational Behavior/Human Resource Management; Organizational Behavior and Human Resource Management Presentations**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	Vijaya Venkataramani, Rajshree Tronetti	Seats (Total: 10)
	Meets January 28, 2019 - May 14, 2019	
	W 11:00am - 12:15pm	VMH 2509

BMGT868V **Special Topics in Organizational Behavior/Human Resource Management; Strategic Human Resource Management**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	Hui Liao	Seats (Total: 12)
	Meets January 31, 2019 - March 14, 2019	
	Th 1:00pm - 4:35pm	VMH 4534

BMGT878C **Special Topics in Strategic Management and Entrepreneurship; Cross Discilpinary Workshop in Strategy and Entrepreneurship**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	Rachelle Sampson	Seats (Total: 12)
	Th 11:00am - 12:30pm	VMH 3330H

BMGT878E **Special Topics in Strategic Management and Entrepreneurship; Overview of Strategy & Entrepreneurship**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	Rajshree Tronetti	Seats (Total: 12)
	Meets January 22, 2019 - March 11, 2019	
	W 2:00pm - 5:35pm	VMH 4568

BMGT878I **Special Topics in Strategic Management and Entrepreneurship; Innovation and Entrepreneurship**

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	Rajshree Tronetti	Seats (Total: 12)
	Meets March 25, 2019 - May 10, 2019	
	W 2:00pm - 5:35pm	VMH 4568

BMGT878P **Special Topics in Strategic Management and Entrepreneurship; Strategy and Entrepreneurship PhD Presentations**

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	Rajshree Tronetti	Seats (Total: 30)
	Th 9:15am - 10:45am	VMH 3330H

BMGT888D **Special Topics in Supply Chain Management**

Credits: 3 Grading Method: Regular

Special topics specific to the Supply Chain Management doctoral field of study.

0101	Niratcha Tungtisanont	Seats (Total: 12)
	M 10:00am - 12:40pm	VMH 3330H

BMGT888I **Special Topics in Supply Chain Management; Industrial Organization Economics: Applications to Strategy**

Credits: 2 Grading Method: Regular

Special topics specific to the Supply Chain Management doctoral field of study.

0101	Wilbur Chung	Seats (Total: 12)
	Meets March 25, 2019 - May 10, 2019	
	Th 2:00pm - 5:35pm	VMH 3332
	Final Exam: Thu May 16th, 2-5:35pm VMH 3332.	

BMGT888P **Special Topics in Supply Chain Management; People and Performance**

Credits: 2 Grading Method: Regular

Special topics specific to the Supply Chain Management doctoral field of study.

0101	Cristian Dezso	Seats (Total: 12)
	Meets January 22, 2019 - March 11, 2019	
	M 9:30am - 1:05pm	VMH 1326

BMGT888W **Special Topics in Supply Chain Management; Workshop in Supply Chain Management**

Credits: 1 Grading Method: Regular

Special topics specific to the Supply Chain Management doctoral field of study.

0101	Martin Dresner	Seats (Total: 10)
	F 1:00pm - 2:30pm	VMH 3332

BMGT898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

BMGT899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

BSCI Biological Sciences Program Spring 2019

BSCI courses are offered by the Biological Science Program and individual College of Computer, Mathematical and Natural Sciences departments, as indicated. The sponsoring department for each course is provided in the course listing. Consult the sponsoring department if you have questions about an individual course (sponsoring departments BIOL - Department of Biology, 2227 Biol-Psyc Building; BSCI - Biological Sciences Program, 1322 Symons Hall; CBMG - Department of Cell Biology and Molecular Genetics, 1219 H.J. Patterson Building; ENTM - Entomology, 4112 PLS Building). Registration in course sections which begin with "SES" is restricted to students admitted into the Science in the Evening Program, administered through the Office of Extended Studies. For complete information, visit: http://oes.umd.edu/index.php?slab=sie, e-mail oes@umd.edu , or call 301-405-7762. The following courses may involve the use of animals. Students who are concerned about the use of animals in teaching have the responsibility to consult the instructor prior to course enrollment to determine whether animals are to be used in the course, whether class exercises involving animals are optional or required, and what alternatives, if any, are available. The College of Computer, Mathematical, and Natural Sciences enforces course prerequisites. Students who do not meet the course prerequisites will be administratively dropped from the course.*

BSCI103 **The World of Biology**

Credits: 4 Grading Method: Regular CORE: LL General Education: DSNL

Additional information: Not acceptable for degree requirements in Biological Sciences, Chemistry, or Biochemistry.

An introduction to modern biology for the non-science major. Major themes include molecular biology, cell biology, evolution and organismal biology. Relevance of study of biology to modern human life will be emphasized.

(Sponsoring Dept.: BSCI). Students must pay a $40.00 laboratory materials fee.

1100	Anahi Espindola, Michael Raupp, Tammatha O'Brien TuTh 12:30pm - 1:45pm M 8:00am - 10:50am	Seats (Total: 24) LEF 2205 HJP 3239	Lab

1101	Anahi Espindola, Michael Raupp, Tammatha O'Brien TuTh 12:30pm - 1:45pm M 11:00am - 1:50pm	Seats (Total: 24) LEF 2205 HJP 3239	 Lab
1103	Anahi Espindola, Tammatha O'Brien, Michael Raupp TuTh 12:30pm - 1:45pm M 2:00pm - 4:50pm	Seats (Total: 24) LEF 2205 HJP 3239	 Lab
1105	Anahi Espindola, Michael Raupp, Tammatha O'Brien TuTh 12:30pm - 1:45pm M 5:00pm - 7:50pm	Seats (Total: 24) LEF 2205 HJP 3239	 Lab
1107	Michael Raupp, Anahi Espindola, Tammatha O'Brien TuTh 12:30pm - 1:45pm Tu 8:00am - 10:50am	Seats (Total: 24) LEF 2205 HJP 3239	 Lab
1108	Michael Raupp, Tammatha O'Brien, Anahi Espindola TuTh 12:30pm - 1:45pm Tu 2:00pm - 4:50pm	Seats (Total: 24) LEF 2205 HJP 3239	 Lab
1109	Anahi Espindola, Tammatha O'Brien, Michael Raupp TuTh 12:30pm - 1:45pm Tu 5:00pm - 7:50pm	Seats (Total: 24) LEF 2205 HJP 3239	 Lab

BSCI103M **The World of Biology**

(Perm req)

Credits: 4 Grading Method: Regular CORE: LL General Education: DSNL

Additional information: Not acceptable for degree requirements in Biological Sciences, Chemistry, or Biochemistry.

An introduction to modern biology for the non-science major. Major themes include molecular biology, cell biology, evolution and organismal biology. Relevance of study of biology to modern human life will be emphasized.

(Sponsoring Dept.: BSCI). Must be taken within 12 months of the semester in which BSCI 103 is taken. A student is eligible to take this course only if the lab scores received in BSCI 103 the last time it was taken totalled at least 80 percent of the maximum possible total. These scores will count for part of the grade in BSCI 103M.

0101	Instructor: TBA TuTh 12:30pm - 1:45pm Contact instructor or department for details.	Seats (Total: 5) LEF 2205	

BSCI120 **Insects**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: LS | General Education: DSNS

A survey of the major groups of insects, their natural history, and their relationships with humans and their environment. Course not acceptable toward major requirements in Biological Sciences, Chemistry or Biochemistry.

(Sponsoring Dept.: ENTM).

0101	Cerruti Hooks, Dennis vanEngelsdorp Tu 2:00pm - 2:50pm Class time/details on ELMs Th 12:00pm - 12:50pm	Seats (Total: 21) PLS 1119 ONLINE PLS 1161	 Discussion
0102	Cerruti Hooks, Dennis vanEngelsdorp Tu 2:00pm - 2:50pm Class time/details on ELMs Th 11:00am - 11:50am	Seats (Total: 21) PLS 1119 ONLINE PLS 1161	 Discussion

BSCI121 **Beekeeping**

Credits: 2 | Grading Method: Regular, Pass-Fail, Audit

Additional information: Course not acceptable toward major requirements in Biological Sciences, Chemistry or Biochemistry.

A study of the life history, behavior and seasonal activities of the honeybee, its place in pollination of flowers with emphasis on plants of economic importance and bee lore in literature.

(Sponsoring Dept.: ENTM).

0101	Nathalie Steinhauer Th 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 36) PLS 1119 ONLINE	

BSCI124 **Plant Biology for Non-Science Students**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSNL (if taken with BSCI125)

Restriction: For non-science majors only; and must not have completed BSCI105; and must not have completed BSCI170 or BSCI171. Additional information: CORE Life Sciences Lab (LL) Course only when taken concurrently with BSCI 125.

A basic course in plant biology specifically designed for the non-science student. Emphasis is placed on an evolutionary and ecological approach to studying fundamental concepts and processes of plants, their place in the biosphere, the importance of plants to man, and the manner in which humans impact on plants and their environment. This course will not count toward graduation requirements for any student in Biological Sciences, Chemistry, Biochemistry or the College of Agriculture and Natural Resources.

(Sponsoring Dept.: CBMG). CORE Life Sciences Lab (LL) Course only when taken concurrently with BSCI125.

1001	Edgar Moctezuma TuTh 2:00pm - 3:15pm	Seats (Total: 220) HJP 0226	

BSCI125 **Plant Biology Laboratory**

Credits: 1	Grading Method: Regular, Pass-Fail, Audit

Corequisite: BSCI124. Restriction: For non-science majors only; and must not have completed BSCI105; and must not have completed BSCI170 or BSCI171. Credit only granted for: BSCI105, BSCI170, or BSCI125. Additional information: CORE Life Sciences Lab (LL) Course only when taken concurrently with BSCI 125.

An introduction to the biology of plants with emphasis on the processes by which plants function, the diversity of plants, and the importance of plants to humans. This course will not count toward graduation requirements for any student in Biological Sciences, Chemistry, Biochemistry or the College of Agriculture and Natural Resources. CORE Lab Science.

(Sponsoring Dept.: CBMG). CORE Life Sciences Lab (LL) Course only when taken concurrently with BSCI 124. Students must pay a $40.00 laboratory materials fee.

1104	Edgar Moctezuma M 12:00pm - 2:00pm	Seats (Total: 24) HJP 3237	Lab
1106	Edgar Moctezuma M 3:00pm - 5:00pm	Seats (Total: 24) HJP 3237	Lab

1107	Edgar Moctezuma Tu 11:00am - 1:00pm	Seats (Total: 24) HJP 3237	Lab
1110	Edgar Moctezuma Tu 3:30pm - 5:30pm	Seats (Total: 24) HJP 3237	Lab
1111	Edgar Moctezuma W 9:00am - 11:00am	Seats (Total: 24) HJP 3237	Lab
1114	Edgar Moctezuma W 12:00pm - 2:00pm	Seats (Total: 24) HJP 3237	Lab
1116	Edgar Moctezuma W 3:00pm - 5:00pm	Seats (Total: 24) HJP 3237	Lab
1118	Edgar Moctezuma Th 11:00am - 1:00pm	Seats (Total: 24) HJP 3237	Lab
1120	Edgar Moctezuma Th 3:30pm - 5:30pm	Seats (Total: 24) HJP 3237	Lab

BSCI160 **Principles of Ecology and Evolution**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with BSCI161), DSNS

Prerequisite: Must have math eligibility of MATH120 or higher. Recommended: For Science majors. Credit only granted for: BSCI106 or BSCI160. Formerly: BSCI106.

Basic principles of biology with special emphasis on ecological and evolutionary biology.

(Sponsoring Dept.: BSCI).

6101	Marjorie Reaka TuTh 2:00pm - 3:15pm	Seats (Total: 150) BRB 1101	
6201	Marcia Shofner TuTh 9:30am - 10:45am	Seats (Total: 120) ESJ 1224	
6301	Marcia Shofner TuTh 12:30pm - 1:45pm	Seats (Total: 120) ESJ 1224	

BSCI161 **Principles of Ecology and Evolution Lab**

Credits: 1 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: BSCI160. Recommended: For Science majors.

Basic laboratory principles of biology with special emphasis on ecological and evolutionary biology.

(Sponsoring Dept.: BSCI). Students must pay a $40.00 laboratory materials fee.

6104	Leo Shapiro M 10:00am - 12:50pm	Seats (Total: 23) HJP 3211	Lab
6107	Leo Shapiro M 3:00pm - 5:50pm	Seats (Total: 23) HJP 3211	Lab
6108	Leo Shapiro M 3:00pm - 5:50pm	Seats (Total: 23) HJP 3217	Lab
6204	Leo Shapiro Tu 10:00am - 12:50pm	Seats (Total: 23) HJP 3211	Lab
6207	Leo Shapiro Tu 2:00pm - 4:50pm	Seats (Total: 23) HJP 3211	Lab
6210	Leo Shapiro Tu 5:00pm - 7:50pm	Seats (Total: 23) HJP 3211	Lab
6211	Leo Shapiro Tu 5:00pm - 7:50pm	Seats (Total: 23) HJP 3217	Lab
6304	Leo Shapiro W 11:00am - 1:50pm	Seats (Total: 23) HJP 3211	Lab
6305	Leo Shapiro W 10:00am - 12:50pm	Seats (Total: 23) HJP 3217	Lab
6307	Leo Shapiro W 2:00pm - 4:50pm	Seats (Total: 23) HJP 3211	Lab
6308	Leo Shapiro W 2:00pm - 4:50pm	Seats (Total: 23) HJP 3217	Lab

6404	Leo Shapiro Th 11:00am - 1:50pm	Seats (Total: 23) HJP 3211	Lab
6407	Leo Shapiro Th 2:00pm - 4:50pm	Seats (Total: 23) HJP 3211	Lab
6410	Leo Shapiro Th 5:00pm - 7:50pm	Seats (Total: 23) HJP 3211	Lab

BSCI170 **Principles of Molecular & Cellular Biology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with BSCI171), DSNS

Prerequisite: Must have math eligibility of MATH120 or higher. Recommended: For Science majors. Credit only granted for: BSCI105 or BSCI170. Formerly: BSCI105.

Basic principles of biology with special emphasis on cellular and molecular biology.

(Sponsoring Dept.: BSCI).

0101	Michael Keller MWF 11:00am - 11:50am	Seats (Total: 260) ESJ 0202
0201	Patricia Shields MWF 9:00am - 9:50am	Seats (Total: 225) ESJ 0202
0301	Reid Compton TuTh 11:00am - 12:15pm	Seats (Total: 221) ESJ 0224
0401	Michael Keller MWF 1:00pm - 1:50pm	Seats (Total: 195) ESJ 0224
SES1	James Sniezek Tu 6:00pm - 8:50pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 24) PLS 1130

BSCI170C **Principles of Molecular & Cellular Biology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with BSCI171), DSNS

Prerequisite: Must have math eligibility of MATH120 or higher. Recommended: For Science majors. Credit only granted for: BSCI105 or BSCI170. Formerly: BSCI105.

Basic principles of biology with special emphasis on cellular and molecular biology.

(Sponsoring Dept.: BSCI). Restricted to BSCI, CHEM and BCHM majors.

0101	Anne Simon MWF 10:00am - 10:50am	Seats (Total: 100) BPS 1243	

BSCI171 **Principles of Molecular & Cellular Biology Laboratory**

Credits: 1 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: BSCI170. Recommended: For Science majors.

Basic laboratory principles of biology with special emphasis on cellular and molecular biology.

(Sponsoring Dept.: BSCI). Students must pay a $40.00 laboratory materials fee.

1021	David Kirschtel M 11:00am - 1:50pm	Seats (Total: 24) HJP 1226	Lab
1023	David Kirschtel M 11:00am - 1:50pm	Seats (Total: 24) HJP 1236	Lab
1031	David Kirschtel M 2:00pm - 4:50pm	Seats (Total: 24) HJP 1226	Lab
1032	David Kirschtel M 2:00pm - 4:50pm	Seats (Total: 24) HJP 1235	Lab
1033	David Kirschtel M 2:00pm - 4:50pm	Seats (Total: 24) HJP 1236	Lab
1041	David Kirschtel M 5:00pm - 7:50pm	Seats (Total: 24) HJP 1226	Lab
1043	David Kirschtel M 5:00pm - 7:50pm	Seats (Total: 24) HJP 1236	Lab
2022	David Kirschtel Tu 11:00am - 1:50pm	Seats (Total: 24) HJP 1235	Lab

2023	David Kirschtel Tu 11:00am - 1:50pm	Seats (Total: 24) HJP 1236	Lab
2024	David Kirschtel Tu 11:00am - 1:50pm	Seats (Total: 23) HJP 1229	Lab
2031	David Kirschtel Tu 2:00pm - 4:50pm	Seats (Total: 24) HJP 1226	Lab
2033	David Kirschtel Tu 2:00pm - 4:50pm	Seats (Total: 24) HJP 1236	Lab
2034	David Kirschtel Tu 2:00pm - 4:50pm	Seats (Total: 24) HJP 1229	Lab
2041	David Kirschtel Tu 6:00pm - 8:50pm	Seats (Total: 24) HJP 1226	Lab
2042	David Kirschtel Tu 6:00pm - 8:50pm	Seats (Total: 24) HJP 1235	Lab
2043	David Kirschtel Tu 6:00pm - 8:50pm	Seats (Total: 24) HJP 1236	Lab
3021	David Kirschtel W 10:00am - 12:50pm	Seats (Total: 24) HJP 1226	Lab
3022	David Kirschtel W 10:00am - 12:50pm	Seats (Total: 24) HJP 1235	Lab
3023	David Kirschtel W 10:00am - 12:50pm	Seats (Total: 24) HJP 1236	Lab
3031	David Kirschtel W 2:00pm - 4:50pm	Seats (Total: 24) HJP 1226	Lab
3032	David Kirschtel W 2:00pm - 4:50pm	Seats (Total: 24) HJP 1235	Lab
3033	David Kirschtel W 2:00pm - 4:50pm	Seats (Total: 24) HJP 1236	Lab

3034	David Kirschtel W 2:00pm - 4:50pm	Seats (Total: 24) HJP 1229	Lab
3041	David Kirschtel W 5:00pm - 7:50pm	Seats (Total: 24) HJP 1226	Lab
3043	David Kirschtel W 5:00pm - 7:50pm	Seats (Total: 24) HJP 1236	Lab
4022	David Kirschtel Th 11:00am - 1:50pm	Seats (Total: 24) HJP 1235	Lab
4023	David Kirschtel Th 11:00am - 1:50pm	Seats (Total: 24) HJP 1236	Lab
4024	David Kirschtel Th 11:00am - 1:50pm	Seats (Total: 23) HJP 1229	Lab
4031	David Kirschtel Th 2:00pm - 4:50pm	Seats (Total: 24) HJP 1226	Lab
4032	David Kirschtel Th 2:00pm - 4:50pm	Seats (Total: 24) HJP 1235	Lab
4033	David Kirschtel Th 2:00pm - 4:50pm	Seats (Total: 24) HJP 1236	Lab
4034	David Kirschtel Th 2:00pm - 4:50pm	Seats (Total: 24) HJP 1229	Lab
4042	David Kirschtel Th 6:00pm - 8:50pm	Seats (Total: 24) HJP 1235	Lab
4043	David Kirschtel Th 6:00pm - 8:50pm	Seats (Total: 24) HJP 1236	Lab
4044	David Kirschtel Th 6:00pm - 8:50pm	Seats (Total: 24) HJP 1229	Lab

SES1	David Kirschtel Th 6:00pm - 8:50pm	Seats (Total: 23) HJP 1226	Lab
	Restricted to students in the SIE Program. Click here for more information.		

BSCI171S **Principles of Molecular & Cellular Biology Laboratory**

Credits: 1 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: BSCI170. Recommended: For Science majors.

Basic laboratory principles of biology with special emphasis on cellular and molecular biology.

(Sponsoring Dept.: BSCI). Students must pay a $40.00 laboratory materials fee. Restricted to College Park Scholars - Life Sciences.

1034	David Kirschtel M 2:00pm - 4:50pm	Seats (Total: 24) HJP 1229	Lab
2032	David Kirschtel Tu 2:00pm - 4:50pm	Seats (Total: 24) HJP 1235	Lab

BSCI201 **Human Anatomy and Physiology I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: LL General Education: DSNL

Prerequisite: BSCI170 and BSCI171; or BSCI105; or students who have taken courses with comparable content may contact the department.

Anatomy and physiology of the skeletal, muscular, neural, endocrine, an sensory systems. Course not acceptable toward major requirements in Biological Sciences, Chemistry or Biochemistry.

(Sponsoring Dept.: BIOL). Students must pay a $40.00 laboratory materials fee.

0101	Caitlin Fox, Meredith Bohannon MWF 12:00pm - 12:50pm M 5:00pm - 7:50pm	Seats (Total: 24) BRB 1101 BPS 0205	Lab
0102	Caitlin Fox, Meredith Bohannon MWF 12:00pm - 12:50pm Tu 8:00am - 10:50am	Seats (Total: 24) BRB 1101 BPS 0205	Lab

0103	Meredith Bohannon, Caitlin Fox MWF 12:00pm - 12:50pm Tu 11:00am - 1:50pm	Seats (Total: 24) BRB 1101 BPS 0205	 Lab
0105	Caitlin Fox, Meredith Bohannon MWF 12:00pm - 12:50pm Tu 2:00pm - 4:50pm	Seats (Total: 24) BRB 1101 BPS 0205	 Lab
0106	Caitlin Fox, Meredith Bohannon MWF 12:00pm - 12:50pm Tu 5:00pm - 7:50pm	Seats (Total: 24) BRB 1101 BPS 0205	 Lab
0107	Caitlin Fox, Meredith Bohannon MWF 12:00pm - 12:50pm W 8:00am - 10:50am	Seats (Total: 24) BRB 1101 BPS 0205	 Lab
0108	Caitlin Fox, Meredith Bohannon MWF 12:00pm - 12:50pm W 2:00pm - 4:50pm	Seats (Total: 24) BRB 1101 BPS 0205	 Lab
0109	Caitlin Fox, Meredith Bohannon MWF 12:00pm - 12:50pm Th 8:00am - 10:50am	Seats (Total: 24) BRB 1101 BPS 0205	 Lab
0110	Meredith Bohannon, Caitlin Fox MWF 12:00pm - 12:50pm Th 11:00am - 1:50pm	Seats (Total: 24) BRB 1101 BPS 0205	 Lab
0111	Meredith Bohannon, Caitlin Fox MWF 12:00pm - 12:50pm M 2:00pm - 4:50pm	Seats (Total: 24) BRB 1101 BPS 0205	 Lab
1101	Caitlin Fox, Justicia Opoku-Edusei TuTh 12:30pm - 1:45pm M 11:00am - 1:50pm	Seats (Total: 24) ESJ 0202 BPS 0205	 Lab
1103	Justicia Opoku-Edusei, Caitlin Fox TuTh 12:30pm - 1:45pm M 2:00pm - 4:50pm	Seats (Total: 24) ESJ 0202 BPS 0275	 Lab

1104	Justicia Opoku-Edusei, Caitlin Fox TuTh 12:30pm - 1:45pm M 5:00pm - 7:50pm	Seats (Total: 24) ESJ 0202 BPS 0275	 Lab
1105	Justicia Opoku-Edusei, Caitlin Fox TuTh 12:30pm - 1:45pm Tu 8:00am - 10:50am	Seats (Total: 24) ESJ 0202 BPS 0275	 Lab
1106	Justicia Opoku-Edusei, Caitlin Fox TuTh 12:30pm - 1:45pm Tu 2:00pm - 4:50pm	Seats (Total: 24) ESJ 0202 BPS 0275	 Lab
1107	Justicia Opoku-Edusei, Caitlin Fox TuTh 12:30pm - 1:45pm Tu 5:00pm - 7:50pm	Seats (Total: 24) ESJ 0202 BPS 0275	 Lab
1108	Justicia Opoku-Edusei, Caitlin Fox TuTh 12:30pm - 1:45pm W 11:00am - 1:50pm	Seats (Total: 24) ESJ 0202 BPS 0205	 Lab
1109	Caitlin Fox, Justicia Opoku-Edusei TuTh 12:30pm - 1:45pm W 5:00pm - 7:50pm	Seats (Total: 24) ESJ 0202 BPS 0205	 Lab
1110	Caitlin Fox, Justicia Opoku-Edusei TuTh 12:30pm - 1:45pm Th 2:00pm - 4:50pm	Seats (Total: 24) ESJ 0202 BPS 0205	 Lab
SES1	Nelson Bennett, Caitlin Fox Tu 6:00pm - 8:50pm Th 6:00pm - 8:50pm	Seats (Total: 24) BPS 1250 BPS 0205	 Lab
	Restricted to students in the SIE Program. Click here for more information.		

BSCI202 **Human Anatomy and Physiology II**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI201; or permission of CMNS-Biology department.

Anatomy and physiology of the cardiovascular, respiratory, immune, digestive, urinary and reproductive systems. Course not acceptable toward major requirements in Biological Sciences, Chemistry or Biochemistry.

(Sponsoring Dept.: BIOL). Students must pay a $40.00 laboratory materials fee.

0101	Tammatha O'Brien, Caitlin Fox TuTh 8:00am - 9:15am M 11:00am - 1:50pm	Seats (Total: 24) ESJ 0224 BPS 0201	 Lab
0102	Tammatha O'Brien, Caitlin Fox TuTh 8:00am - 9:15am Tu 9:30am - 12:20pm	Seats (Total: 24) ESJ 0224 BPS 0201	 Lab
0103	Caitlin Fox, Tammatha O'Brien TuTh 8:00am - 9:15am Tu 3:30pm - 6:20pm	Seats (Total: 24) ESJ 0224 BPS 0201	 Lab
0104	Caitlin Fox, Tammatha O'Brien TuTh 8:00am - 9:15am W 2:00pm - 4:50pm	Seats (Total: 24) ESJ 0224 BPS 0201	 Lab
0105	Caitlin Fox, Tammatha O'Brien TuTh 8:00am - 9:15am W 5:00pm - 7:50pm	Seats (Total: 24) ESJ 0224 BPS 0201	 Lab
0106	Caitlin Fox, Tammatha O'Brien TuTh 8:00am - 9:15am Th 9:30am - 12:20pm	Seats (Total: 24) ESJ 0224 BPS 0201	 Lab
0107	Caitlin Fox, Tammatha O'Brien TuTh 8:00am - 9:15am Th 9:30am - 12:20pm	Seats (Total: 24) ESJ 0224 BPS 0275	 Lab
0108	Caitlin Fox, Tammatha O'Brien TuTh 8:00am - 9:15am Th 12:30pm - 3:20pm	Seats (Total: 24) ESJ 0224 BPS 0201	 Lab
0109	Caitlin Fox, Tammatha O'Brien TuTh 8:00am - 9:15am Th 6:30pm - 9:20pm	Seats (Total: 24) ESJ 0224 BPS 0201	 Lab
0110	Caitlin Fox, Tammatha O'Brien TuTh 8:00am - 9:15am M 8:00am - 10:50am	Seats (Total: 24) ESJ 0224 BPS 0201	 Lab

1101	Caitlin Fox, Tammatha O'Brien TuTh 9:30am - 10:45am M 2:00pm - 4:50pm	Seats (Total: 24) BRB 1101 BPS 0201	Lab
1102	Caitlin Fox, Tammatha O'Brien TuTh 9:30am - 10:45am M 5:00pm - 7:50pm	Seats (Total: 24) BRB 1101 BPS 0201	Lab
1103	Tammatha O'Brien, Caitlin Fox TuTh 9:30am - 10:45am Tu 12:30pm - 3:20pm	Seats (Total: 24) BRB 1101 BPS 0201	Lab
1104	Caitlin Fox, Tammatha O'Brien TuTh 9:30am - 10:45am Tu 6:30pm - 9:20pm	Seats (Total: 24) BRB 1101 BPS 0201	Lab
1105	Tammatha O'Brien, Caitlin Fox TuTh 9:30am - 10:45am W 8:00am - 10:50am	Seats (Total: 24) BRB 1101 BPS 0201	Lab
1106	Tammatha O'Brien, Caitlin Fox TuTh 9:30am - 10:45am W 11:00am - 1:50pm	Seats (Total: 24) BRB 1101 BPS 0201	Lab
1107	Tammatha O'Brien, Caitlin Fox TuTh 9:30am - 10:45am Th 12:30pm - 3:20pm	Seats (Total: 24) BRB 1101 BPS 0275	Lab
1108	Tammatha O'Brien, Caitlin Fox TuTh 9:30am - 10:45am Th 3:30pm - 6:20pm	Seats (Total: 24) BRB 1101 BPS 0201	Lab
1109	Caitlin Fox, Tammatha O'Brien TuTh 9:30am - 10:45am Th 3:30pm - 6:20pm	Seats (Total: 24) BRB 1101 BPS 0275	Lab
1110	Tammatha O'Brien, Caitlin Fox TuTh 9:30am - 10:45am Th 6:30pm - 9:20pm	Seats (Total: 24) BRB 1101 BPS 0275	Lab

BSCI207 **Principles of Biology III - Organismal Biology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106. And BSCI170 and BSCI171; or BSCI105. And must have completed or be concurrently enrolled in CHEM131.

The diversity, structure and function of organisms as understood from the perspective of their common physicochemical principles and unique evolutionary histories.

(Sponsoring Dept.: BSCI).

0101	Leo Shapiro MWF 11:00am - 11:50am	Seats (Total: 200) HJP 0226	
0201	Leo Shapiro MWF 2:00pm - 2:50pm	Seats (Total: 100) BPS 1243	

BSCI222 **Principles of Genetics**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131 and CHEM132; and (BSCI160 and BSCI161; or BSCI106); and (BSCI170 and BSCI171; or BSCI105). Or must have completed BSCI105 or (BSCI170 and BSCI171); and two semesters of chemistry.

Principles and mechanisms of heredity and gene expression. Considers plant, animal, and microbial organisms.

(Sponsoring Dept.: BSCI).

7106	David Straney MWF 1:00pm - 1:50pm M 4:00pm - 5:50pm	Seats (Total: 23) BRB 1101 PLS 1121	 Discussion
7108	David Straney MWF 1:00pm - 1:50pm W 4:00pm - 5:50pm	Seats (Total: 23) BRB 1101 HJP 3233	 Discussion
7110	David Straney MWF 1:00pm - 1:50pm Th 10:00am - 11:50am	Seats (Total: 23) BRB 1101 HJP 3233	 Discussion
7112	David Straney MWF 1:00pm - 1:50pm Tu 6:00pm - 7:50pm	Seats (Total: 23) BRB 1101 HJP 3233	 Discussion

7114	David Straney MWF 1:00pm - 1:50pm Tu 8:00am - 9:50am	Seats (Total: 23) BRB 1101 HJP 3233	 Discussion
7116	David Straney MWF 1:00pm - 1:50pm Tu 10:00am - 11:50am	Seats (Total: 23) BRB 1101 HJP 3233	 Discussion
7118	David Straney MWF 1:00pm - 1:50pm Th 12:00pm - 1:50pm	Seats (Total: 23) BRB 1101 HJP 3233	 Discussion
7120	David Straney MWF 1:00pm - 1:50pm Th 8:00am - 9:50am	Seats (Total: 23) BRB 1101 PLS 1121	 Discussion
7130	David Straney MWF 1:00pm - 1:50pm Th 2:00pm - 3:50pm	Seats (Total: 23) BRB 1101 PLS 1121	 Discussion
7214	Kimberly Paczolt TuTh 12:30pm - 1:45pm W 12:00pm - 1:50pm	Seats (Total: 23) BRB 1101 HJP 3233	 Discussion
7216	Kimberly Paczolt TuTh 12:30pm - 1:45pm W 2:00pm - 3:50pm	Seats (Total: 23) BRB 1101 PLS 1121	 Discussion
7218	Kimberly Paczolt TuTh 12:30pm - 1:45pm W 4:00pm - 5:50pm	Seats (Total: 23) BRB 1101 PLS 1121	 Discussion
7220	Kimberly Paczolt TuTh 12:30pm - 1:45pm Tu 8:00am - 9:50am	Seats (Total: 23) BRB 1101 PLS 1121	 Discussion
7221	Kimberly Paczolt TuTh 12:30pm - 1:45pm M 12:00pm - 1:50pm	Seats (Total: 23) BRB 1101 PLS 1121	 Discussion

7222	Kimberly Paczolt TuTh 12:30pm - 1:45pm M 2:00pm - 3:50pm	Seats (Total: 23) BRB 1101 HJP 3233	 Discussion
7224	Kimberly Paczolt TuTh 12:30pm - 1:45pm Tu 2:00pm - 3:50pm	Seats (Total: 23) BRB 1101 HJP 3233	 Discussion
7232	Kimberly Paczolt TuTh 12:30pm - 1:45pm M 6:00pm - 7:50pm	Seats (Total: 23) BRB 1101 HJP 3233	 Discussion
7310	Raymond StLeger TuTh 9:30am - 10:45am Tu 4:00pm - 5:50pm	Seats (Total: 23) HJP 0226 HJP 3233	 Discussion
7311	Raymond StLeger TuTh 9:30am - 10:45am W 8:00am - 9:50am	Seats (Total: 23) HJP 0226 PLS 1121	 Discussion
7312	Raymond StLeger TuTh 9:30am - 10:45am M 10:00am - 11:50am	Seats (Total: 23) HJP 0226 HJP 3233	 Discussion
7313	Raymond StLeger TuTh 9:30am - 10:45am M 2:00pm - 3:50pm	Seats (Total: 23) HJP 0226 PLS 1121	 Discussion
7315	Raymond StLeger TuTh 9:30am - 10:45am W 2:00pm - 3:50pm	Seats (Total: 23) HJP 0226 HJP 3233	 Discussion
7320	Raymond StLeger TuTh 9:30am - 10:45am M 4:00pm - 5:50pm	Seats (Total: 23) HJP 0226 HJP 3233	 Discussion
7325	Raymond StLeger TuTh 9:30am - 10:45am W 6:00pm - 7:50pm	Seats (Total: 23) HJP 0226 HJP 3233	 Discussion

7330	Raymond StLeger TuTh 9:30am - 10:45am W 12:00pm - 1:50pm	Seats (Total: 23) HJP 0226 PLS 1121	 Discussion
7332	Raymond StLeger TuTh 9:30am - 10:45am Tu 2:00pm - 3:50pm	Seats (Total: 23) HJP 0226 PLS 1121	 Discussion
7335	Raymond StLeger TuTh 9:30am - 10:45am W 10:00am - 11:50am	Seats (Total: 23) HJP 0226 HJP 3233	 Discussion
SES1	Keith Lampel Tu 6:00pm - 8:50pm Th 6:00pm - 7:50pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 23) PLS 1162 HJP 3233	 Discussion

BSCI223 **General Microbiology**

Credits: 4	Grading Method: Regular, Pass-Fail, Audit	CORE: LL	General Education: DSNL, SCIS

Prerequisite: BSCI170 and BSCI171; or BSCI105.

Fundamental concepts in morphology, physiology, genetics, immunology, ecology, and pathogenic microbiology. Applications of microbiology to medicine, the food industry and biotechnology.

(Sponsoring Dept.: CBMG) Students must pay a $40.00 laboratory materials fee.

1021	Erin Tran TuTh 11:00am - 11:50am TuTh 9:00am - 10:50am	Seats (Total: 20) BRB 1101 MCB 1201	 Lab
1025	Erin Tran TuTh 11:00am - 11:50am TuTh 9:00am - 10:50am	Seats (Total: 20) BRB 1101 MCB 1205	 Lab
1026	Erin Tran TuTh 11:00am - 11:50am TuTh 9:00am - 10:50am	Seats (Total: 20) BRB 1101 MCB 1206	 Lab

1101	Erin Tran TuTh 11:00am - 11:50am MW 10:00am - 11:50am	Seats (Total: 20) BRB 1101 MCB 1201	Lab
1105	Erin Tran TuTh 11:00am - 11:50am MW 10:00am - 11:50am	Seats (Total: 20) BRB 1101 MCB 1205	Lab
1106	Erin Tran TuTh 11:00am - 11:50am MW 10:00am - 11:50am	Seats (Total: 20) BRB 1101 MCB 1206	Lab
1121	Erin Tran TuTh 11:00am - 11:50am TuTh 12:00pm - 1:50pm	Seats (Total: 20) BRB 1101 MCB 1201	Lab
1125	Erin Tran TuTh 11:00am - 11:50am TuTh 12:00pm - 1:50pm	Seats (Total: 20) BRB 1101 MCB 1205	Lab
1126	Erin Tran TuTh 11:00am - 11:50am TuTh 12:00pm - 1:50pm	Seats (Total: 20) BRB 1101 MCB 1206	Lab
1201	Erin Tran TuTh 11:00am - 11:50am MW 12:00pm - 1:50pm	Seats (Total: 20) BRB 1101 MCB 1201	Lab
1206	Erin Tran TuTh 11:00am - 11:50am MW 12:00pm - 1:50pm	Seats (Total: 20) BRB 1101 MCB 1206	Lab
1221	Erin Tran TuTh 11:00am - 11:50am TuTh 2:00pm - 3:50pm	Seats (Total: 20) BRB 1101 MCB 1201	Lab
1225	Erin Tran TuTh 11:00am - 11:50am TuTh 2:00pm - 3:50pm	Seats (Total: 20) BRB 1101 MCB 1205	Lab

1226	Erin Tran TuTh 11:00am - 11:50am TuTh 2:00pm - 3:50pm	Seats (Total: 20) BRB 1101 MCB 1206	 Lab
1301	Erin Tran TuTh 11:00am - 11:50am MW 2:00pm - 3:50pm	Seats (Total: 20) BRB 1101 MCB 1201	 Lab
1306	Erin Tran TuTh 11:00am - 11:50am MW 2:00pm - 3:50pm	Seats (Total: 20) BRB 1101 MCB 1206	 Lab
2401	Erin Tran TuTh 11:00am - 11:50am MW 4:00pm - 5:50pm	Seats (Total: 20) BRB 1101 MCB 1201	 Lab
2406	Erin Tran TuTh 11:00am - 11:50am MW 4:00pm - 5:50pm	Seats (Total: 20) BRB 1101 MCB 1206	 Lab
SES1	John Buchner TuTh 6:00pm - 6:50pm TuTh 7:00pm - 9:00pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 20) MCB 1207 MCB 1201	 Lab

BSCI258 **College Park Scholars Internship**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Credit to be determined by CPS Director. Must be completed by end of sophomore year.

(Sponsoring Dept.: BSCI).

8005	Jessica Wilke Contact instructor or department for details.	Seats (Total: 90)

BSCI279 **Supplemental Study; Supplemental Study in Biology**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI279B **Supplemental Study; BioFIRE Spring Colloquium**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

Restricted to BioFire students.

0101	Katerina Thompson, Lital Ehrlich	Seats (Total: 60)
	Tu 3:30pm - 4:45pm	IRB 1116

BSCI279C **Supplemental Study; Catalyst Program Seminar**

(Perm req)

Credits: 1 Grading Method: Regular

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept: BIOL).

0101	Katerina Thompson	Seats (Total: 47)
	M 3:30pm - 5:00pm	BPS 1243

BSCI279H **Supplemental Study; Catalyst Program Seminar**

(Perm req)

Credits: 1 Grading Method: Regular

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept: BIOL).

0101	Katerina Thompson	Seats (Total: 70)
	M 3:30pm - 5:00pm	BPS 1243

BSCI279P **Supplemental Study; Undergraduate Teaching Fellows Professional Development Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept: BSCI). Prerequisite: permission of department.

Contact department for information to register for this course.

BSCI279Q **Supplemental Study; Readings in Neurophysiology**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept.: BIOL).

0101	Elizabeth Quinlan, Daniel Butts, Ricardo Araneda, Patrick Kanold Contact instructor or department for details.	Seats (Total: 10)

BSCI279R **Supplemental Study; Undergraduate Research Rotation**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept.: CBMG).

Contact department for information to register for this course.

BSCI279T **Supplemental Study; BSCI Learning Assistants**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept: BSCI).

Contact department for information to register for this course.

BSCI283 **Principles of Microbiology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit General Education: DSNL, SCIS

Prerequisite: BSCI207 and BSCI222. Credit only granted for: BSCI223 or BSCI283. Additional information: Priority given to BSCI, BCHM and CHEM majors.

Introduction to microorganisms designed for science majors. Genetic principles underlying microbial abilities; microbial structure-function relationships; metabolism, physiology, and ecology of microorganisms; interactions between microorganisms (including pathogens) and their hosts.

(Sponsoring Dept.: CBMG). Students must pay a $40.00 laboratory materials fee.

1205	Daniel Dwyer MW 10:00am - 10:50am MW 12:00pm - 1:50pm	Seats (Total: 20) HJP 2242 MCB 1205	 Lab
1305	Daniel Dwyer MW 10:00am - 10:50am MW 2:00pm - 3:50pm	Seats (Total: 20) HJP 2242 MCB 1205	 Lab

BSCI288 **Internship; Field Experience**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

An individual experience arranged by the student with the instructor.

(Sponsoring Dept.: BSCI).

Contact department for information to register for this course.

BSCI288H **Internship**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

An individual experience arranged by the student with the instructor.

(Sponsoring Dept: BSCI).

Contact department for information to register for this course.

BSCI289 **Off-Campus Internship**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Elective credit for formally established off-campus research internship. Permission of Director of Outreach required.

(Sponsoring Dept.: BSCI). Provides credit for off-campus research internships. This credit counts as elective toward graduation, but does not satisfy any Biological Sciences degree requirements (For information about research credit that does count toward Biological Sciences contact the Biological Sciences Program, room 1322 Symons Hall). This requires that a contract form be filed with the Director of Undergraduate Research and Internship Programs, Room 1313 Symons Hall, prior to the internship. The contract must be finalized and signed by the research supervisor at the end of the semester before credit will be awarded.

1110	Katerina Thompson Contact instructor or department for details.	Seats (Total: 15)
1111	Katerina Thompson Contact instructor or department for details.	Seats (Total: 40)

BSCI329 **Instructional Assistance Practicum**

(Perm req)

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Students serve as instructional assistants in selected undergraduate biology courses. Roles and responsibilities are determined on a course- specific basis and approved by the College Undergraduate Program Committee.

(Sponsoring Dept.: BIOL). Credit cannot be applied to the requirements of any Biological Sciences Major. Prerequiste: permission of department.

1016	Hilary Bierman Contact instructor or department for details.	Seats (Total: 5)
1250	Justicia Opoku-Edusei Contact instructor or department for details.	Seats (Total: 20)

BSCI329H **Instructional Assistance Practicum; Honors Instructional Assistance Practicum**

(Perm req)

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Students serve as instructional assistants in selected undergraduate biology courses. Roles and responsibilities are determined on a course- specific basis and approved by the College Undergraduate Program Committee.

(Sponsoring Dept.: BIOL). Credit cannot be applied to the requirements of any Biological Sciences Major. Prerequiste: permission of department.

2080	Todd Cooke, Sabrina Kramer Contact instructor or department for details.	Seats (Total: 20)

BSCI330 **Cell Biology and Physiology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM131 and CHEM132. And minimum grade of C- in BSCI170 and BSCI171; or minimum grade of C- in BSCI105. Restriction: Must not have completed BSCI230. Credit only granted for: BSCI230 or BSCI330. Formerly: BSCI230.

Biochemical and physiological mechanisms underlying cellular function. Properties of cells which make life possible and mechanisms by which cells provide energy, reproduce, and regulate and integrate with each other and their environment.

(Sponsoring Dept: BIOL). Specialization Areas: PHNB, CEBG, MICB, ECEV, and GENB. Students must pay a $40.00 laboratory materials fee.

0101	Beth Parent MWF 10:00am - 10:50am M 11:00am - 1:50pm	Seats (Total: 24) BRB 1101 BPS 0207	 Lab
0102	Beth Parent MWF 10:00am - 10:50am M 2:00pm - 4:50pm	Seats (Total: 24) BRB 1101 BPS 0207	 Lab
0103	Beth Parent MWF 10:00am - 10:50am M 6:00pm - 8:50pm	Seats (Total: 24) BRB 1101 BPS 0207	 Lab
0104	Beth Parent MWF 10:00am - 10:50am Tu 9:30am - 12:20pm	Seats (Total: 24) BRB 1101 BPS 0207	 Lab
0105	Beth Parent MWF 10:00am - 10:50am Tu 2:00pm - 4:50pm	Seats (Total: 24) BRB 1101 BPS 0207	 Lab
0106	Beth Parent MWF 10:00am - 10:50am W 11:00am - 1:50pm	Seats (Total: 24) BRB 1101 BPS 0207	 Lab
0107	Beth Parent MWF 10:00am - 10:50am W 2:00pm - 4:50pm	Seats (Total: 24) BRB 1101 BPS 0207	 Lab

0108	Beth Parent MWF 10:00am - 10:50am Th 9:30am - 12:20pm	Seats (Total: 24) BRB 1101 BPS 0207	 Lab
0109	Beth Parent MWF 10:00am - 10:50am Th 2:00pm - 4:50pm	Seats (Total: 24) BRB 1101 BPS 0207	 Lab
0111	Beth Parent MWF 10:00am - 10:50am M 6:00pm - 8:50pm	Seats (Total: 24) BRB 1101 BPS 0213	 Lab
1101	Kenneth Frauwirth TuTh 9:30am - 10:45am M 2:00pm - 4:50pm	Seats (Total: 24) ESJ 0224 BPS 0213	 Lab
1102	Kenneth Frauwirth TuTh 9:30am - 10:45am Tu 11:00am - 1:50pm	Seats (Total: 24) ESJ 0224 BPS 0213	 Lab
1103	Kenneth Frauwirth TuTh 9:30am - 10:45am Tu 2:30pm - 5:20pm	Seats (Total: 24) ESJ 0224 BPS 0213	 Lab
1104	Kenneth Frauwirth TuTh 9:30am - 10:45am Tu 6:00pm - 8:50pm	Seats (Total: 24) ESJ 0224 BPS 0213	 Lab
1106	Kenneth Frauwirth TuTh 9:30am - 10:45am W 2:00pm - 4:50pm	Seats (Total: 24) ESJ 0224 BPS 0213	 Lab
1107	Kenneth Frauwirth TuTh 9:30am - 10:45am Th 11:00am - 1:50pm	Seats (Total: 24) ESJ 0224 BPS 0213	 Lab
1108	Kenneth Frauwirth TuTh 9:30am - 10:45am Th 2:30pm - 5:20pm	Seats (Total: 24) ESJ 0224 BPS 0213	 Lab

SES1	Elizabeth Read-Connole Tu 6:30pm - 9:30pm Th 6:30pm - 9:30pm	Seats (Total: 24) BPS 1238 BPS 0213	 Lab
	Restricted to students in the SIE Program. Click here for more information.		

BSCI334 **Mammalogy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI207. And minimum grade of C- in BSCI160 and BSCI161; or minimum grade of C- in BSCI106.

Introduction to the biology of mammals, including evolution, physiological, and behavioral specializations.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: GENB and ECEV.

0101	Katerina Thompson TuTh 12:30pm - 1:45pm	Seats (Total: 75) ESJ 0215	

BSCI335 **Mammalogy Laboratory**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI160 and BSCI161; or minimum grade of C- in BSCI106. And minimum grade of C- in BSCI207; and must have completed or be concurrently enrolled in BSCI334.

Lab and field techniques for the study of mammals, focusing on their identification, anatomy, histology, spatial distribution, ecology, and behavior.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences specialization areas: ECEV and GENB. Students must pay a $40.00 laboratory materials fee.

0101	Katerina Thompson Tu 2:00pm - 4:50pm	Seats (Total: 20) HJP 2230	 Lab
0102	Katerina Thompson W 2:00pm - 4:50pm	Seats (Total: 20) HJP 2230	 Lab

BSCI337 **Biology of Insects**

Credits: 4 Grading Method: Regular, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106; or permission of CMNS-Entomology department.

An overview of the biology, evolution and diversity of insects and their relatives. Insect morphology, physiology, behavior and ecology; the impact of insects on humanity and the management of pest insect populations; assembly of an insect collection is required.

(Sponsoring Dept.: ENTM). Specialization Areas: GENB and ECEV. Students must pay a $40.00 laboratory materials fee.

0101	Jian Wang TuTh 9:30am - 10:45am Th 2:00pm - 4:50pm	Seats (Total: 18) PLS 1113 PLS 1161	 Lab
0102	Jian Wang TuTh 9:30am - 10:45am Tu 2:00pm - 4:50pm	Seats (Total: 18) PLS 1113 PLS 1161	 Lab

BSCI338D **Special Topics in Biology; Complexity of Cancer**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI338F **Special Topics in Biology; iGEM Research Seminar**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept.: BIOL). Restriction: permission of instructor. Also offered as BIOE389F. Credit granted for BSCI338F or BIOE389F. This course is open to iGEM team members to develop a synthetic biology research project for the internatial Genentically Engineered Machines competition.

0101	Jason Kahn, Edward Eisenstein Th 3:00pm - 4:50pm	Seats (Total: 30) ESJ 2212	

BSCI338I **Special Topics in Biology; Medical Biotechnology & Drug Development**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI338J **Special Topics in Biology; Medical Exploration of HIV/AIDS**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI338M **Special Topics in Biology; Human Health and Disease: A Clinical Approach**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI338R **Special Topics in Biology; Darwinian Medicine**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept: BIOL). Acceptable toward Biological Sciences specialization areas: ECEV, GENB, and PHNB. Prerequisite: BSCI160 and BSCI161; or BSCI106. And BSCI222. Physicians and biologists have come to realize that evolutionary theory can contribute greatly to our understanding of disease processes and how we treat maladies. In this course, we will explore the integration of evolutionary biology and medical practice.This course involves lectures and readings, and students are expected to participate actively in discussions.

0101	Gerald Borgia	Seats (Total: 25)
	F 2:00pm - 5:00pm	PLS 1117

BSCI338Z **Special Topics in Biology; Field Research**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept: BIOL). Cannot be used as credit toward the major requirements for any Biological Sciences major. Contact the Biology Department Undergraduate Office for course information.

Contact department for information to register for this course.

BSCI339C **Selected Topics in Biology; Cell Biology Lab**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, and other selected instruction courses in various biological subject matter.

(Sponsoring Dept.: BIOL). Credit will be granted for BSCI330 or BSCI339C. Students must pay the $40.00 laboratory materials fee.

Contact department for information to register for this course.

BSCI339I **Selected Topics in Biology; Cellular Mechanisms of Aging and Disease**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, and other selected instruction courses in various biological subject matter.

This course will explore the cellular mechanisms underlying aging and a variety of noninfectious diseases and disorders ranging from diabetes and obesity to Alzheimer's and various cancers. In addition to lectures, students will read and discuss relevant primary and secondary literature. Assessments will include student-led discussion of primary literature and group presentations of disease topics.

SG91	Hadiya Woodham	Seats (Total: 25)
	Th 10:00am - 12:30pm	Location: TBA
	Registration is restricted to Biological Sciences- Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.	

BSCI339Q **Selected Topics in Biology; Diseases Due to Dysfunctional Cell Organelles**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, and other selected instruction courses in various biological subject matter.

(Sponsoring Dept: BIOL). Acceptable towards Biological SciencesSpecialization Areas: CEBG (Cell Biology category), GENB (Cell BiologyPhysiology category), and PHNB. Prerequisites: BSCI330 or BCHM461 or BCHM463. A seminar-style course aimed at giving students opportunities to research, prepare, and present advanced-level lectures on genetically linked disorders of cell organelles.

0101	Albert Ades	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	PLS 1172

BSCI339V **Selected Topics in Biology; Readings in Genetics**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, and other selected instruction courses in various biological subject matter.

(Sponsoring Dept: BIOL). Acceptable toward Biological Sciences specialization areas: CEBG (Additional Courses), ECEV, and GENB (Genetics & Evolution). Prerequisite: BSCI222. Seminar discussing current papers in genetics and evolution. Specific topics will be selected based on student interests, across the disciplines of evolutionary genetics, genomics, and molecular biology.

0101	Thomas Kocher	Seats (Total: 14)
	Th 3:00pm - 5:00pm	BPS 1208

BSCI339X **Selected Topics in Biology; Advanced Cellular Neuroscience**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Lectures, seminars, and other selected instruction courses in various biological subject matter.

Prerequisite: required, C- or better in BSCI353; recommended, C- or bett er in BSCI440 or another upper-level neuroscience course. (Sponsoring Dept: BIOL). Applicable to Biological Sciences specialization areas: GENB and PHNB. Readings and discussion in cellular and molecular mechanisms underlying neural circuit development and function.

0101	Colenso Speer	Seats (Total: 5)
	TuTh 3:30pm - 5:30pm	BPS 1230

BSCI348 **Special Topics in Cell Biology and Molecular Genetics**

(Perm req)

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). May be repeated, but only 3 credits may be applied to major requirements.

Contact department for information to register for this course.

BSCI348A **Special Topics in Cell Biology and Molecular Genetics; Scientific Teaching Internship**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). Students will act as Undergraduate Teaching Assistants for BSCI223. Prerequisite: A or B in BSCI223 and permission of instructor. Student must be available for one of the BSCI223 lab periods. Students interested in this teaching/leadership opportunity should contact Dr. John Buchner for application information: JBuchner@umd.edu. This course is applicable for the Enrichment credits required of all Biological Sciences students in majors with 0404 codes. For others this is elective credit.

0101	John Buchner	Seats (Total: 22)	
	Tu 4:00pm - 4:50pm	MCB 1123	
	Contact instructor or department for details.		

BSCI348C **Special Topics in Cell Biology and Molecular Genetics; Cell Biology Lab**

Credits: 1 Grading Method: Regular

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). Acceptable toward Biological Sciences Specialization Areas: PHNB, CEBG, and GENB. CBMG Department permission required. Prerequisites: BSCI420. Credit will be granted for BSCI348C, BSCI339C or BSCI421. Students must pay a $40.00 laboratory materials fee.

0101	Kan Cao	Seats (Total: 3)	
	W 1:00pm - 4:50pm	PLS 1171	Lab

BSCI348P **Special Topics in Cell Biology and Molecular Genetics; Introductory Biology Curriculum and Instruction Practicum**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). Students will learn about methodologies and curriculum tools applicable to the field of undergraduate science education; the practicum component of the course will allow students to directly apply such innovative approaches through an undergraduate teaching and learning assistantship (UTLA) in conjunction with BSCI105. Prerequisite: A or B in BSCI105 and permission of instructor. Students must be available for one of the BSCI105 lecture periods. Students interested in this teaching/leadership opportunity should contact Dr. Patricia Shields (pshields@umd.edu) for further information. This course is applicable for the Enrichment credits required of all Biological students in majors with 0404 codes. For others this is an elective credit.

0101	Patricia Shields, Elanor Spadafora	Seats (Total: 20)
	M 5:00pm - 6:50pm	ESJ 1215
	Contact instructor or department for details.	

BSCI348Q **Special Topics in Cell Biology and Molecular Genetics; Special Topics in Cell Biology and Molecular Genetics: Introductory Biology Learning Assistantship**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). Students apply methodologies learned in BSCI348P by serving as an undergraduate learning assistant (ULA) in conjunction with BSCI170 (formerly BSCI105). Prerequisite: A or B in BSCI348P and permission of instructor. Student must be available for one of the BSCI170 lecture periods (MWF 11-11:50 or 2:00-2:50). Students interested in this teaching/leadership opportunity should contact Dr. Patricia Shields (pshields@umd.edu) for further information.

0101	Patricia Shields	Seats (Total: 40)
	M 6:00pm - 6:50pm	ESJ 1215

BSCI348R **Special Topics in Cell Biology and Molecular Genetics; Microbiology Internship**

(Perm req)

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). This course is an opportunity for students interested in microbiology to pursue a research project in an off-campus lab. The student must see the instructor and complete an information sheet found on the web site, prior to enrolling in the course.

0101	Najib El-Sayed	Seats (Total: 10)
	Contact instructor or department for details.	

BSCI348T **Special Topics in Cell Biology and Molecular Genetics; Research Methods for Terrapin Teachers**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG).

0101	Anisha Campbell, Joelle Presson	Seats (Total: 20)
	Contact instructor or department for details.	

BSCI353 **Principles of Neuroscience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (BSCI207, BSCI330). Corequisite: PHYS122, PHYS142, or PHYS132.

Principles of nervous system function, ranging from molecular and cellular basis of neuron function through nervous system integration.

(Sponsoring Dept: BIOL). Acceptable toward Biological Sciences specialization areas: CEBG, GENB, and PHNB.

0101	Daniel Butts	Seats (Total: 150)
	TuTh 11:00am - 12:15pm	BPS 1250

BSCI360 **Principles of Animal Behavior**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106. And BSCI170 and BSCI171; or BSCI105. And BSCI222.

Study of animal behavior with emphasis on its evolution and function. Topics include genetic basis of behavior, communication, aggression, foraging, cooperation, mate selection, and relevance for conservation.

(Sponsoring Dept: BIOL). Acceptable toward Biological Sciences specialization areas: ECEV, GENB, and PHNB.

0101	Gerald Borgia	Seats (Total: 20)	
	MW 1:00pm - 1:50pm	BPS 0283	
	F 12:00pm - 12:50pm	PLS 1119	Discussion

0102	Gerald Borgia MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 20) BPS 0283 PLS 1119	Discussion

BSCI361 **Principles of Ecology**

Credits: 4 Grading Method: Regular, Pass-Fail

Prerequisite: BSCI160 and BSCI161; or BSCI106. And (MATH130, MATH136, or MATH140).

Basic principles of population, community, and ecosystem ecology. Use o these principles to predict possible consequences of human-caused changes in the environment and to understand the level of uncertainty of those predictions.

(Sponsoring Dep.: BIOL). Acceptable toward Biological Sciences Specialization Areas: ECEV and GENB.

0101	Jenny Zambrano TuTh 9:30am - 10:45am W 1:00pm - 1:50pm	Seats (Total: 25) PLS 1130 PLS 1146	Discussion
0102	Jenny Zambrano TuTh 9:30am - 10:45am W 2:00pm - 2:50pm	Seats (Total: 25) PLS 1130 PLS 1146	Discussion
0103	Jenny Zambrano TuTh 9:30am - 10:45am W 3:00pm - 3:50pm	Seats (Total: 25) PLS 1130 PLS 1146	Discussion

BSCI370 **Principles of Evolution**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106.

Understanding evolutionary processes in a natural and human environment including adaptation; DNA sequence, protein, and genome evolution; evolution of developmental mechanisms; mechanisms of evolutionary change (mutation, natural selection, drift); epidemiology; coevolution and biological control; speciation; comparative methods; extinction and conservation; human evolution.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: PHNB, GENB, and ECEV.

0101	Carlos Machado	Seats (Total: 100)
	TuTh 9:30am - 10:45am	PLS 1140

BSCI378H **Cell Biology and Molecular Genetics Department Honors Seminar**

Credits: 1 Grading Method: Regular

Required seminar for all students participating in departmental honors research program.

(Sponsoring Dept.: CBMG). Corequisite: BSCI379H. Restricted to students participating in the CBMG Departmental Honors Program.

Click here for more course information.

0101	Zhongchi Liu	Seats (Total: 23)
	F 2:00pm - 2:50pm	BRB 3101

BSCI379G **Cell Biology and Molecular Genetics Department Research; Research in Cell Biology and Molecular Genetics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

This course is arranged to provide qualified majors an opportunity to pursue research problems under the supervision of a member of the department.

(Sponsoring Dept.: CBMG). Prequisite: permission of department. See CBMG department Undergraduate office.

Contact department for information to register for this course.

BSCI379H **Cell Biology and Molecular Genetics Department Honors Research**

(Perm req)

Credits: 1-3 Grading Method: Regular

Student should consult program guidelines. Research project carried out under guidance of faculty advisor.

(Sponsoring Dept.: CBMG). Corequisite: BSCI378H. Restricted to students participating in the CBMG Departmental Honors Program.

Click here for more course information.

Contact department for information to register for this course.

BSCI379L **Cell Biology and Molecular Genetics Department Research; Lab Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

This course is arranged to provide qualified majors an opportunity to pursue research problems under the supervision of a member of the department.

(Sponsoring Dept.: CBMG). Any combination of 3 credits of BSCI379G, BSCI379L, and BSCI379H can be used to satisfy the enrichment requirement in CEBG, ECEV, MICB, or PHNB or an upper-level elective in GENB. Students must have successfully completed at least one semester in a Cell Biology & Molecular Genetics department research lab before getting permission to take BSCI 379L in the same lab. Students completing at least 4 credits of laboratory research including at east one semester taking BSCI 379L may substitute this experience for one of the two upper-level laboratory courses required to complete any BSCI major.

Contact department for information to register for this course.

BSCI389 **Entomology Department Research**

(Perm req)

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Credit to be determined by the department. Should be taken during the junior year. Investigations of assigned entomological problems. No more than 4 credit hours of BSCI389 may be applied to the 120 credit hours needed for the Bachelor's degree.

(Sponsoring Dept.: ENTM).

Contact department for information to register for this course.

BSCI389H **Entomology Department Honors Research**

(Perm req)

Credits: 1-2 Grading Method: Regular

(Sponsoring Dept.: ENTM).

Contact department for information to register for this course.

BSCI389L **Entomology Department Research; Lab Research**

(Perm req)

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Credit to be determined by the department. Should be taken during the junior year. Investigations of assigned entomological problems. No more than 4 credit hours of BSCI389 may be applied to the 120 credit hours needed for the Bachelor's degree.

(Sponsoring Dept.: ENTM).

Contact department for information to register for this course.

BSCI392 **Biology of Extinct Animals**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106.

A survey of extinct animals that have few, if any, direct living descendants. The principles governing the functional design of animals will be used to infer life styles for extinct, and frequently bizarre, organisms.

(Sponsoring Dept.: ENTM).

0101	Bretton Kent	Seats (Total: 55)	
	MWF 10:00am - 10:50am	PLS 1130	

BSCI393 **Biology of Extinct Animals Laboratory**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in BSCI392.

An overview of the techniques used in paleobiological reconstructions o extinct animals.

(Sponsoring Dept.: ENTM).

0101	Bretton Kent	Seats (Total: 32)	
	Class time/details on ELMs	ONLINE	Lab
	M 2:00pm - 2:50pm	PLS 1119	Lab

BSCI398H **Biology Department Honors Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Required seminar for all students participating in departmental honors research program.

(Sponsoring Dept.: BIOL). Prerequisite: permission of department.

1000	Alexandra Bely	Seats (Total: 35)
	M 4:00pm - 4:50pm	BPS 1208

BSCI399 **Biology Department Research; Biology Department Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research and/or integrated reading in biology under the direction and close supervision of a member of the faculty.

(Sponsoring Dept: BIOL)

Contact department for information to register for this course.

BSCI399H **Biology Department Honors Research**

(Perm req)

Credits: 1-2 Grading Method: Regular

A laboratory research problem; required each semester during honors participation and culminating in an honors thesis.

(Sponsoring Dept: BIOL).

Contact department for information to register for this course.

BSCI399L **Biology Department Research; Biology Lab Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research and/or integrated reading in biology under the direction and close supervision of a member of the faculty.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI401 **Animal Communication**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106. And must have completed one semester of physics; and must have completed one semester of organic chemistry. Recommended: A course in animal behavior or biopsychology. Credit only granted for: BSCI401, BSCI 338W or BIOL 708W. Formerly: BSCI338W.

Examining the mechanisms by which animal produce and receive signals in each sensory modality; and quantifying the type and amount of information conveyed in signals and how animals attend to such information.

(Sponsoring Dept.: BIOL). Applicable toward Biological Sciences specialization areas: ECEV, GENB, and PHNB.

0101	Gerald Wilkinson	Seats (Total: 36)
	TuTh 3:30pm - 4:45pm	ESJ 2309

BSCI402 **Genomics of Sensory Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI222; or permission of instructor. Credit only granted for: BSCI338C or BSCI402. Formerly: BSCI338C.

An advanced course covering topics on the molecular basis of senses and the application of genomic techniques to studies of sensory systems & sensory ecology.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: CEBG, GENB, and PHNB.

0101	Karen Carleton	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	PLS 1113

BSCI406 **Membranes and Biological Interfaces**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI330. Recommended: PHYS122; or PHYS132; or (PHYS260 and PHYS261). Credit only granted for: BSCI339R, BSCI406, BIOL709R. Formerly: BSCI339R.

An interdisciplinary approach to membrane biology, starting with the physical chemistry of interfaces and model systems and continuing into transport, excitability, and signaling. The course is oriented toward students with broad backgrounds in biology and biophysics. Success in the course will come from a background that prepares students to think mechanistically and quantitatively rather than having substantial factual biological knowledge.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: PHNB, CEBG, and GENB.

0101	Sergei Sukharev	Seats (Total: 14)
	TuTh 3:30pm - 4:45pm	PLS 1111

BSCI407 **Behavioral Genetics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI222.

Behavior represents an organism's most dynamic phenotype and allows an animal to respond immediately to both internal and external cues. We will explore the genetic and epigenetic mechanisms that underlie behavioral variation and the associated neurological, hormonal, and developmental pathways. We will examine modern approaches used to study behavioral genetics in model and non-model systems, and in humans. Using case studies, we will explore a range of complex phenotypes including those related to mating, parental care, aggression, circadian rhythm, locomotion, learning, anxiety, and addiction.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences specialization areas: CEBG (Genetics), ECEV, GENB (Genetics & Evolution), and PHNB.

0101	Heidi Fisher TuTh 2:00pm - 3:15pm	Seats (Total: 30) BPS 1232	

BSCI410 Molecular Genetics

Credits: 3 Grading Method: Regular, Audit

Prerequisite: BSCI222. And must have completed CHEM233; or (CHEM231 and CHEM232).

An advanced genetics course emphasizing the molecular basis of gene structure and function in the context of modern approaches to the genetics of humans and model organisms.

(Sponsoring Dept.: CBMG) Acceptable toward Biological Sciences specialization areas: PHNB, MICB, CEBG, GENB and ECEV.

0101	Vera Stupina, Zhongchi Liu TuTh 11:00am - 12:15pm	Seats (Total: 120) HJP 0226	
0102	Louisa Wu TuTh 12:30pm - 1:45pm	Seats (Total: 70) JMZ 0220	

BSCI412 Microbial Genetics

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI223 and BSCI222.

A laboratory/lecture based course that covers the fundamentals of mutation, mobile genetic elements and transmission genetics of microbial organisms using both classical and molecular approaches.

(Sponsoring Dept: CBMG). Acceptable toward Biological Sciences Specialization Areas: MICB, CEBG, and GENB. Students must pay a $40.00 laboratory materials fee.

0101	Vincent Lee, John Buchner TuTh 12:30pm - 1:30pm TuTh 1:30pm - 4:30pm	Seats (Total: 18) MCB 1207 MCB 1143	 Lab
0103	Vincent Lee, John Buchner TuTh 12:30pm - 1:30pm TuTh 1:30pm - 4:30pm	Seats (Total: 18) MCB 1207 MCB 1138	 Lab

BSCI413 **Recombinant DNA**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI330, BSCI223, or BSCI230; and BSCI222. Formerly: ZOOL452.

An advanced course presenting the tools and procedures of genetic engineering. Theory and practical applications of recombinant DNA techniques to understanding eukaryotic gene structure and expression.

(Sponsoring Dept.: CBMG).

Contact department for information to register for this course.

BSCI416 **Human Genetics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: Minimum grade of C- in BSCI410. Recommended: BSCI330.

Approaches to human genetics and applications to biology and medicine focusing on specific human genetic topics using primary research papers as the main resource.

(Sponsoring Dept.: CBMG).

0101	Stephen Mount, John Moult MW 3:30pm - 4:45pm	Seats (Total: 48) HJP 2242

BSCI417 **Microbial Pathogenesis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: CS General Education: DSSP

Prerequisite: BSCI223 and BSCI222. Restriction: Junior standing or higher. Credit only granted for: BSCI348M or BSCI417. Formerly: BSCI348M.

Current research in microbial pathogenesis and the molecular and cellular basis of bacterial disease. Comprehensive overview of the molecular basis of pathogenesis with a focus on model microbial systems to illustrate mechanisms of disease pathogenesis. Topics covered: how microorganisms attach to and enter cells; how host cells are damaged by microbial products; how the host responds to invasion; and host-pathogen evolution.

(Sponsoring Dept.: CBMG).

0101	Kevin McIver TuTh 9:30am - 10:45am	Seats (Total: 30) BPS 1238

BSCI420 **Cell Biology Lectures**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI330, BSCI222, CHEM231, and CHEM232. Credit only granted for: BSCI420 or BSCI421.

Molecular and biochemical bases of cellular organization and function in eukaryotes.

(Sponsoring Dept.: CBMG). Acceptable toward Biological Sciences Specialization Areas: PHNB, CEBG, and GENB.

0101	Vera Stupina, Sougata Roy	Seats (Total: 48)	
	TuTh 11:00am - 12:15pm	MCB 1207	

BSCI421 **Cell Biology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI330, BSCI222, CHEM231, and CHEM232. Credit only granted for: BSCI420 or BSCI421.

Molecular and biochemical basis of cellular organization and function in eukaryotes.

(Sponsoring Dept.: CBMG). Acceptable toward Biological Sciences Specialization Areas: PHNB, CEBG, and GENB. Students must pay a $40.00 laboratory materials fee.

0102	Sougata Roy, Vera Stupina, Kan Cao	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	MCB 1207	
	W 1:00pm - 4:50pm	PLS 1171	Lab

BSCI422 **Principles of Immunology**

Credits: 3 Grading Method: Regular

Prerequisite: BSCI223 and BSCI222. Recommended: BSCI330. Restriction: Junior standing or higher.

The immune system in health and disease. Presentation and analysis of the cellular and molecular processes that comprise the immune system.

(Sponsoring Dept.: CMBG). Acceptable toward Biological Sciences Specialization Areas: PHNB, MICB, CEBG, and GENB. Also offered as CBMG699W.

0101	Kenneth Frauwirth, David Mosser MW 12:00pm - 12:50pm Th 12:30pm - 1:20pm	Seats (Total: 25) ESJ 2204 ATL 2316	Discussion
0102	Kenneth Frauwirth, David Mosser MW 12:00pm - 12:50pm F 2:00pm - 2:50pm	Seats (Total: 25) ESJ 2204 PLS 1146	Discussion
0103	David Mosser, Kenneth Frauwirth MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 25) ESJ 2204 BPS 1232	Discussion
0104	David Mosser, Kenneth Frauwirth MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ESJ 2204 PLS 1146	Discussion

BSCI423 **Immunology Laboratory**

Credits: 2 Grading Method: Regular

Prerequisite: BSCI223 and BSCI222. Corequisite: BSCI422. Restriction: Junior standing or higher.

Current techniques for assessment of immune status and evaluation of th immune response, including monoclonal antibody production, Western blotting, cytokine assays, ELISA and flow cytometry.

(Sponsoring Dept.: CBMG). Acceptable toward Biological Sciences Specialization Areas:PHNB, MICB, CEBG and GENB. Students must pay a $40.00 laboratory materials fee.

0101	Wenxia Song MW 2:00pm - 3:50pm	Seats (Total: 18) MCB 1143	Lab
0103	Wenxia Song MW 1:00pm - 2:50pm	Seats (Total: 18) MCB 1135	Lab

BSCI424 **Pathogenic Microbiology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI223.

The role of bacteria and fungi in the diseases of humans with emphasis upon the differentiation and culture of microorganisms, types of disease, modes of disease transmission, prophylactic, therapeutic, and epidemiological aspects.

(Sponsoring Dept.: CBMG) Acceptable toward Biological Sciences Program Specialization Areas: MICB, and GENB.

Contact department for information to register for this course.

BSCI433 **Biology of Cancer**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI222 and BSCI330; or permission of CMNS-Biological Sciences UG Program.

Causes and consequences of neoplastic transformations at the biochemica and cellular levels.

(Sponsoring Dept.: BIOL). Acceptable towards Biological Sciences Specialization Areas: PHNB, CEBG, and GENB.

0101	Albert Ades TuTh 9:30am - 10:45am	Seats (Total: 100) BPS 1250

BSCI437 **General Virology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI222; or permission of CMNS-Biological Sciences UG Program. Restriction: Junior standing or higher.

Discussion of the physical and chemical nature of viruses, virus cultivation and assay methods, virus replication, viral diseases with emphasis on the oncogenic viruses, viral genetics, and characteristics of the major virus groups.

(Sponsoring Dept.: CBMG). Specialization Areas: MICB, CEBG, and GENB.

0101	Jeffrey DeStefano MWF 11:00am - 11:50am	Seats (Total: 80) MCB 1207
SG91	Gilad Ofek MW 11:00am - 12:15pm *Registration is restricted to Biological Sciences- Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.*	Seats (Total: 40) Location: TBA

BSCI440 **Mammalian Physiology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI330; and (CHEM231 and CHEM232; or must have completed CHEM233). Or permission of CMNS-Biological Sciences UG Program.

A study of the cardiovascular, hemopoietic, gastrointestinal, renal and respiratory systems. Chemical and endocrine regulation of physiological functions in mammals. Course does not count as an upper level lab for BIOL majors (see BSCI441).

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: PHNB, and GENB.

0101	Peter Kropp MWF 9:00am - 9:50am M 12:00pm - 1:50pm	Seats (Total: 31) ESJ 1224 PLS 1111	Discussion
0102	Peter Kropp MWF 9:00am - 9:50am Tu 12:30pm - 2:20pm	Seats (Total: 31) ESJ 1224 PHY 0405	Discussion
0103	Peter Kropp MWF 9:00am - 9:50am W 10:00am - 11:50am	Seats (Total: 31) ESJ 1224 PLS 1113	Discussion
0104	Peter Kropp MWF 9:00am - 9:50am M 12:00pm - 1:50pm	Seats (Total: 31) ESJ 1224 PLS 1119	Discussion
0201	Justicia Opoku-Edusei MWF 10:00am - 10:50am M 2:00pm - 3:50pm	Seats (Total: 30) ESJ 1224 PLS 1111	Discussion
0202	Justicia Opoku-Edusei MWF 10:00am - 10:50am Tu 2:00pm - 3:50pm	Seats (Total: 30) ESJ 1224 SPH 0305	Discussion
0203	Justicia Opoku-Edusei MWF 10:00am - 10:50am W 12:00pm - 1:50pm	Seats (Total: 30) ESJ 1224 BPS 1232	Discussion
0204	Justicia Opoku-Edusei MWF 10:00am - 10:50am F 2:00pm - 3:50pm	Seats (Total: 30) ESJ 1224 CHM 0122	Discussion

SES1	Justicia Opoku-Edusei	Seats (Total: 30)	
	Tu 6:00pm - 9:00pm Th 6:00pm - 9:00pm	PLS 1140 PLS 1140	 Discussion
	Restricted to students in the SIE Program. Click here for more information.		
SG91	David Sandstrom	Seats (Total: 40)	
	MWF 11:00am - 12:15pm	BLD2 3022	
	Registration is restricted to Biological Sciences- Shady Grove majors. Permission is required for UMCP undergraduate students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.		

BSCI441 **Mammalian Physiology Laboratory**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in BSCI440.

Laboratory exercises in experimental mammalian physiology.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Program Specialization Areas: PHNB and GENB. Students must pay a $40.00 laboratory materials fee.

0101	Hilary Bierman	Seats (Total: 20)	
	M 1:00pm - 1:50pm Tu 2:00pm - 5:50pm	BPS 1243 PLS 1181	 Lab
0102	Hilary Bierman	Seats (Total: 20)	
	M 1:00pm - 1:50pm W 2:00pm - 5:50pm	BPS 1243 PLS 1181	 Lab
0104	Hilary Bierman	Seats (Total: 20)	
	M 1:00pm - 1:50pm M 2:00pm - 5:50pm	BPS 1243 PLS 1181	 Lab

BSCI442 **Plant Physiology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI170 and BSCI171; or BSCI105; or PLSC201. And CHEM231 and CHEM232; or CHEM237; or permission of CMNS-Biological Sciences UG Program. Restriction: Must not have completed ENST407; or must not have completed PLSC400. Also offered as: PLSC400. Credit only granted for: BSCI442 or PLSC400.

A survey of plant physiology and development and responses and adaptation to the environment

(Sponsoring Dept.: BSCI) Students must pay a $40.00 laboratory materials fee.

0101	Wendy Peer, Jose Feijo MWF 9:00am - 9:50am Tu 9:00am - 12:00pm	Seats (Total: 24) PLS 1130 PLS 1153	 Lab
0102	Jose Feijo, Wendy Peer MWF 9:00am - 9:50am Tu 4:30pm - 7:30pm	Seats (Total: 24) PLS 1130 PLS 1153	 Lab

BSCI446 **Neural Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI330 and BSCI353.

Neural development, followed by sensory, motor and integrative system organization in the central nervous system.

(Sponsoring Dept.: BIOL) Acceptable toward Biological Sciences Program Specialization Areas: PHNB, and GENB.

0101	Ricardo Araneda TuTh 12:30pm - 1:45pm	Seats (Total: 40) PLS 1119

BSCI447 **General Endocrinology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI330, CHEM241, and CHEM242.

Functions and dysfunctions of the endocrine system with special reference to mammals.

(Sponsoring Dept.: ENTM). Acceptable toward Biological Sciences Program Specialization Areas: PHNB, and GENB.

0101	Tammatha O'Brien TuTh 11:00am - 12:15pm	Seats (Total: 70) PLS 1140

BSCI452 **Diseases of the Nervous System**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI330; and minimum grade of C- in BSCI353. Also offered as: NACS728, BIOL708. Credit only granted for: BSCI452, BSCI338N, BIOL708E, or NACS728N. Formerly: BSCI338N.

An advanced course covering the neuroanatomy, function, and organization of the nervous system and its implication for pathology and disease.

(Sponsoring Dept.: BIOL) Acceptable toward Biological Sciences Program Specialization Areas: PHNB, and GENB.

0101	Quentin Gaudry TuTh 2:00pm - 3:15pm	Seats (Total: 40) BPS 0283	

BSCI454 Neurobiology Laboratory

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in BSCI330; and must have completed or be concurrently enrolled in BSCI353; and must have completed or be concurrently enrolled in PHYS122, PHYS132, or PHYS142.

Basic neuroanatomical techniques, intracellular and extracellular recordings of electrical potentials from nerve and muscle.

(Sponsoring Dept.: BIOL). Specialization areas: CEBG, PHNB, and GENB. Students must pay a $40.00 laboratory materials fee.

0101	Hilary Bierman M 1:00pm - 4:00pm	Seats (Total: 20) BPS 0257	Lab
0102	Hilary Bierman Tu 12:30pm - 3:30pm	Seats (Total: 20) BPS 0257	Lab
0103	Hilary Bierman W 1:00pm - 4:00pm	Seats (Total: 20) BPS 0257	Lab
0104	Hilary Bierman Th 12:30pm - 3:30pm	Seats (Total: 20) BPS 0257	Lab

SG91	David Sandstrom Th 2:00pm - 5:00pm	Seats (Total: 16) BLD2 4012	Lab
	Registration is restricted to Biological Sciences- Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.		
SG92	David Sandstrom Tu 2:00pm - 5:00pm	Seats (Total: 16) BLD2 4012	Lab
	Registration is restricted to Biological Sciences- Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.		

BSCI462 **Population Ecology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH130, MATH136, or MATH140; and BSCI361.

Theory of population growth and regulation, life tables, and theory of competition and predation, evolution in ecological settings, community structure and dynamics.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Program Specialization Areas: ECEV, and GENB.

0101	Karen Lips TuTh 9:30am - 10:45am	Seats (Total: 35) BPS 0283

BSCI473 **Marine Ecology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI207.

Courses in evolution and animal behavior are strongly recommended. A detailed analysis of the evolutionary ecology of marine invertebrates; emphasis on testing of theories and on current literature.

(Sponsoring Dept: BIOL). Acceptable toward Biological Sciences specialization areas: ECEV and GENB.

0101	Marjorie Reaka TuTh 12:30pm - 1:45pm	Seats (Total: 45) BPS 0283

BSCV CIVICUS Spring 2019

BSCV182 **Civicus and Service-Learning**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCV191 and BSCV181; and must have completed or be concurrently enrolled in SOCY105. Restriction: Must be in the Civicus program. Credit only granted for: BSOS182 or BSCV182. Formerly: BSOS182.

Students will examine domestic societal issues and their national, regional, and local dimensions from political, economic, and policy perspectives. Students will work with local direct service non-profit organizations.

0101	Julie Randolph M 3:30pm - 5:15pm	Seats (Total: 26) SOM 0101	
0201	Julie Randolph Tu 3:30pm - 5:15pm	Seats (Total: 26) SOM 0101	

BSCV302 **Civicus Capstone**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCV301. Restriction: Sophomore standing or higher. Credit only granted for: BSOS302 or BSCV302. Formerly: BSOS302.

Capstone course required for CIVICUS citation. Supervised internship, community service, or research project on civil society topic. Application and continued study of skills and concepts, grounded in the social sciences, relevant to understanding and effectively dealing with contemporary social issues.

By permission of instructor.

0101	Korey Rothman W 6:00pm - 6:50pm Class time/details on ELMs	Seats (Total: 25) HJP 0226 ONLINE	 Discussion
0201	Korey Rothman Tu 6:00pm - 6:50pm Class time/details on ELMs	Seats (Total: 25) SKN 0200 ONLINE	 Discussion

BSCV309 **Civicus Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Review and analysis of contemporary social issues.

Contact department for information to register for this course.

BSGC Global Communities Spring 2019

BSGC102 **Global Issues**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE | General Education: DSHS, DVUP

Prerequisite: BSGC101. Restriction: Must be in Global Communities Living-Learning program.

A survey of some of the major global challenges facing society today, such as human trafficking, nuclear security, and global health. We explore contending approaches to resolving problems, culminating in a major group project.

0101	Virginia Haufler Tu 3:30pm - 4:45pm Th 11:00am - 12:15pm	Seats (Total: 24) TWS 0310 DOR 0134	Discussion
0102	Virginia Haufler Tu 3:30pm - 4:45pm Th 2:00pm - 3:15pm	Seats (Total: 24) TWS 0310 DOR 0134	Discussion
0103	Virginia Haufler Tu 3:30pm - 4:45pm Th 9:30am - 10:45am	Seats (Total: 23) TWS 0310 DOR 0134	Discussion
0104	Virginia Haufler Tu 3:30pm - 4:45pm Th 3:30pm - 4:45pm	Seats (Total: 24) TWS 0310 DOR 0134	Discussion

BSGC398A **BSGC Experiential Learning in Global Communities: Global Service; Alternative Break/International Service**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVCC

Experiential learning is an integral element of the Global Communities program. Students will gain an understanding of social issues in marginalized communities, engage in service-learning, and develop an action plan for civic engagement in a diverse global society.

Restriction: Must be in Global Communities Living-Learning program. GC students who receive acceptance into select Alternate Breaks or International Service programs can apply for Global Experience credit by enrolling in BSGC 398A. This course will meet periodically throughout the semester and will require directed readings, reflective writings, and projects related to your Alternative Break/International Service experience.

0101	Natalie Vinski Ibrahim	Seats (Total: 40)
	Contact instructor or department for details.	

BSGC399 **Topical Investigations in Global Communities**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Variable from 1-3 credits and repeatable up to 6 if content varies.

Restriction: Must be in Global Communities Living-Learning Program.

0101	Virginia Haufler	Seats (Total: 5)
	Contact instructor or department for details.	

BSOS Behavioral and Social Sciences Spring 2019

BSOS248A **Leadership Seminar I; Leadership Seminar I Ambassadors**

(Perm req)

Credits: 2 Grading Method: Regular

A topics course in the behavioral and social sciences designed to develop student leaders with skills that will address important issues of the college and offers diverse viewpoints intended to challenge common perceptions of leadership, technology programs and communication.

Contact department for information to register for this course.

BSOS248P **Leadership Seminar I; Peer Mentors**

Credits: 1 Grading Method: Regular

A topics course in the behavioral and social sciences designed to develop student leaders with skills that will address important issues of the college and offers diverse viewpoints intended to challenge common perceptions of leadership, technology programs and communication.

Contact department for information to register for this course.

BSOS288I **Special Topics in Behavioral and Social Sciences; Internship Practicum in the Social Sciences**

(Perm req)

Credits: 1-3 Grading Method: Regular

Introductory special topics course focusing on an interdisciplinary topic related to behavioral and social sciences.

Contact department for information to register for this course.

BSOS331 **Python Programming for the Social Sciences**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Students must have completed a least one college-level statistics course. Restriction: Must be enrolled in a BSOS major; or permission of instructor.

Python has become the most powerful programming language in advanced statistics and data analytics. It includes expansive packages for data handling and processing, including the latest developments in machine learning, and offers Integrated Development Environments (IDE) for code development, testing, debugging, and graphical representation. In addition, python is deployed on virtually all high performance computing clusters, taking advantage of multi-processing, large memory, and GPU enhanced computing environments. This course offers a thorough introduction to python and those packages that are fundamental to data processing and analysis, image processing, natural language processing, machine learning.

0101	Franz Klein	Seats (Total: 34)
	M 4:00pm - 6:00pm	LEF 0227

BSOS355 **Social Sciences Internship Practicum**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must have earned a minimum of 60 credits; and minimum cumulative GPA of 2.5; and must have completed at least 1 semester at UMD. Credit only granted for: BSOS388I or BSOS355. Formerly: BSOS388I.

BSOS 355 is an internship course open to all majors. It will enable students to articulate and apply the scholarship from the discipline related to their specific internship placement into a real-work environment.

0101	Kathryn Hopps	Seats (Total: 40)
	Contact instructor or department for details.	

BSOS358A **Leadership Practicum II**

(Perm req)

Credits: 1 Grading Method: Regular

This course puts into practice the advanced skills and elements learned in the seminar series that directly benefit the college.

Contact department for information to register for this course.

BSOS358D **Leadership Practicum II; Leadership Practicum II DSAC**

(Perm req)

Credits: 1 Grading Method: Regular

This course puts into practice the advanced skills and elements learned in the seminar series that directly benefit the college.

Contact department for information to register for this course.

BSOS358L **Leadership Practicum II; DSAC Officers**

(Perm req)

Credits: 1 Grading Method: Regular

This course puts into practice the advanced skills and elements learned in the seminar series that directly benefit the college.

Contact department for information to register for this course.

BSOS358P **Leadership Practicum II; Peer Mentors**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

This course puts into practice the advanced skills and elements learned in the seminar series that directly benefit the college.

Contact department for information to register for this course.

BSOS386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Contact department for information to register for this course.

BSOS388B **Behavioral and Social Sciences Special Topics; Innovation and Social Change: Do Good Now**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP, SCIS

Advanced special topics course focusing on an interdisciplinary topic related to the Behavioral and Social Sciences.

Also offered as HONR348D and PLCY388D. Credit will be granted for BSOS388B, HONR348D or PLCY388D. This is a BSOS Solutions Lab and a Fearless Ideas course offered in collaboration with PUAF388D(section 0201) and HONR348D. Explore the many mechanisms for achieving social impact through social innovation. This is team-based, highly interactive and dynamic course, that provides an opportunity for students to generate solutions to a wide range of problems facing many communities today. This course deepens the students understanding of entrepreneurship and innovation practices by guiding them through the creation and implementation process as applied to a project idea of their choice. These projects serve as the laboratory to implement topics such as design systems thinking, developing and communicating a strategy and goals, project management and implementation skills, teamwork and talent management, fundraising and revenue generation, marketing and partner development, leadership skills and project sustainability. For more information, visit dogood.umd.edu.

0101	Tricia Homer	Seats (Total: 17)
	W 3:00pm - 5:30pm	SQH 2120

BSOS388E **Behavioral and Social Sciences Special Topics; CIDCM Minor Practicum**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics course focusing on an interdisciplinary topic related to the Behavioral and Social Sciences.

Contact department for information to register for this course.

BSOS388Q **Behavioral and Social Sciences Special Topics; CESAR Directed Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics course focusing on an interdisciplinary topic related to the Behavioral and Social Sciences.

Contact department for information to register for this course.

BSOS388T **Behavioral and Social Sciences Special Topics; Sustainability Task Force**

(Perm req)

Credits: 1 Grading Method: Regular

Advanced special topics course focusing on an interdisciplinary topic related to the Behavioral and Social Sciences.

Must be a member of the BSOS Sustainability Task Force. Contact bsos-ugdean@umd.edu for more information. Repeatable: Up to 3 credits. A student leadership group engaged in the implementation of the BSOS Sustainability Plan. As part of this course, students will explore current topics in sustainability through semester-long projects. This course is part of the BSOS Solutions Lab.

Contact department for information to register for this course.

BSOS388X **Behavioral and Social Sciences Special Topics; Innovation in the Public Sector II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics course focusing on an interdisciplinary topic related to the Behavioral and Social Sciences.

Prerequisites: BSOS388F or GVPT388B For permission to register, email bsos-ugdean@umd.edu. with your name, UID, and brief statement of why this course is of interest to you.

0101	Kenneth Ulman	Seats (Total: 20)
	W 4:00pm - 6:30pm	CHT 2113

BSOS399 **Directed Study in Behavioral and Social Sciences**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Guidance for the advanced student capable of interdisciplinary study on special projects under the supervision of the Assistant Dean for Student Affairs.

Contact department for information to register for this course.

BSOS399C **Directed Study in Behavioral and Social Sciences; Civicus Undergraduate Teaching Assistant Directed Study**

(Perm req)

Credits: 1-3 Grading Method: Regular

Guidance for the advanced student capable of interdisciplinary study on special projects under the supervision of the Assistant Dean for Student Affairs.

Contact department for information to register for this course.

BSOS399P **Directed Study in Behavioral and Social Sciences; Undergraduate Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Guidance for the advanced student capable of interdisciplinary study on special projects under the supervision of the Assistant Dean for Student Affairs.

Contact department for information to register for this course.

BSOS399Q **Directed Study in Behavioral and Social Sciences; CESAR**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Guidance for the advanced student capable of interdisciplinary study on special projects under the supervision of the Assistant Dean for Student Affairs.

Contact department for information to register for this course.

BSOS448C **Teaching Assistant Practicum; Civicus**

(Perm req)

Credits: 1-3 Grading Method: Regular

Supervised practicum for teaching assistants for BSOS/UNIV courses.

Contact department for information to register for this course.

BSOS448D **Teaching Assistant Practicum**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Supervised practicum for teaching assistants for BSOS/UNIV courses.

Contact department for information to register for this course.

BSOS448I **Teaching Assistant Practicum; Internship**

(Perm req)

Credits: 1 Grading Method: Regular

Supervised practicum for teaching assistants for BSOS/UNIV courses.

Contact department for information to register for this course.

BSOS448T **Teaching Assistant Practicum; Teaching Assistant Practicum (UNIV)**

(Perm req)

Credits: 1 Grading Method: Regular

Supervised practicum for teaching assistants for BSOS/UNIV courses.

Contact department for information to register for this course.

BSOS631 **Python Programming for the Social Sciences**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Students must have completed a least one college-level statistics course. Restriction: Must be enrolled in a BSOS major; or permission of instructor. Also offered as: BSOS331. Credit only granted for: BSOS331, BSOS631.

Python has become the most powerful programming language in advanced statistics and data analytics. It includes expansive packages for data handling and processing, including the latest developments in machine learning, and offers Integrated Development Environments (IDE) for code development, testing, debugging, and graphical representation. In addition, python is deployed on virtually all high performance computing clusters, taking advantage of multi-processing, large memory, and GPU enhanced computing environments. This course offers a thorough introduction to python and those packages that are fundamental to data processing and analysis, image processing, natural language processing, machine learning.

0101	Franz Klein M 4:00pm - 6:00pm	Seats (Total: 6) LEF 0227

BSST Terrorism Studies Spring 2019

BSST331 **Response to Terrorism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Terrorism Studies minor program.

Explores the manners in which a variety of different actors respond to both terrorist incidents and the threat of terrorism. Examines local responses to terrorists incidents; local impacts of terrorism including effects on individual and group attitudes and behaviors; policy decisions made in response to both terrorist attacks and the threat of terrorism; terrorism prevention, deterrence, interdiction, and mitigation efforts; and individual and community recovery from terrorist attacks.

Restricted to students in one of the following minors: IDCM, Gobal Poverty Minor, or International Engineering.

0101	Thomas Guarrieri M 2:00pm - 4:45pm *Restricted to students in the Global Terrorism Minor; to obtain permission email education@start.umd.edu.*	Seats (Total: 35) ESJ 2212
0201	Thomas Guarrieri M 2:00pm - 4:45pm *Restricted to students in the IDCM Minor, Global Poverty Minor, and Intl Engineering Minor; to obtain permission email education@start.umd.edu.*	Seats (Total: 10) ESJ 2212

BSST338F **Special Topics in Terrorism Studies; Media in War and Crisis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

Contact department for information to register for this course.

BSST338I **Special Topics in Terrorism Studies; Arab-Israeli Relations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

Contact department for information to register for this course.

BSST338K **Special Topics in Terrorism Studies; Nexus of Terrorism and Crime**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

SG91	Steve Sin Tu 3:30pm - 6:00pm *Limit to CCJS students at Shady Grove.*	Seats (Total: 30) BLD3 2225

BSST338N **Special Topics in Terrorism Studies; Arms Control in the Nuclear Realm**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

Contact department for information to register for this course.

BSST338R **Special Topics in Terrorism Studies; Far-Right Extremism: Violent Ideologies and Actions**

Credits: 3 Grading Method: Regular

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

0101	Elizabeth Yates W 2:00pm - 4:45pm	Seats (Total: 30) ESJ 2212

0201	Elizabeth Yates	Seats (Total: 10)
	W 2:00pm - 4:45pm	ESJ 2212
	Restricted to students in the Global Terrorism Minor.	

BSST338Y **Special Topics in Terrorism Studies; Seminar in Terrorism Studies: The New Theater of Terror: Online Terrorism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

This course examines the relationships between modern terrorists and the new media, how terrorists use the online platforms, how democracies can respond to the challenge, and what are the prices of various measures. Also offered as ISRL448V. Credit granted for BSST338Y or ISRL448V.

0101	Gabriel Weimann	Seats (Total: 25)
	Meets March 25, 2019 - May 13, 2019	
	MW 3:00pm - 5:45pm	HBK 1112

BSST358J **Special Topics in Study Abroad III; Disaster Recovery in Japan**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

BSST386 **Experiential Learning in Terrorism Studies**

(Perm req)

Credits: 1-5 Grading Method: Regular

Repeatable to 10 credits.

This course will supplement student's experiential learning experience, or internship in the field of terrorism studies and homeland security with guided reflection on their experiences.

0101	Elizabeth Wasden	Seats (Total: 25)
	Contact instructor or department for details.	

BSST399T **Individual Study in Terrorism Studies; Teaching Terrorism**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

An independent study course for students in the Global Terrorism Minor program.

Prerequisite: permission of department.

0101	Elizabeth Wasden Contact instructor or department for details.	Seats (Total: 6)
0102	Elizabeth Wasden Contact instructor or department for details.	Seats (Total: 5)
0103	Elizabeth Wasden Contact instructor or department for details.	Seats (Total: 5)

BSST631 **Societal Impacts of and Responses to Terrorism**

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be in Terrorism Analysis Graduate Certificate Program; or permission of department. Credit only granted for: BSOS631 or BSST631. Formerly: BSOS631.

Explores the manners in which a variety of different actors respond to both terrorist incidents and the threat of terrorism. Examines local responses to terrorist incidents; local impacts of terrorism including effects on individual and group attitudes and behaviors; policy decisions made in response to both terrorist attacks and the threat of terrorism; terrorism prevention, deterrence, interdiction, and mitigation efforts; and individual and community recovery from terrorist attacks.

Restricted to students in the Graduate Certificate in Terrorism Analysis, all other students should contact education@start.umd.edu to obtain permission to register.

ST01	Michael Egnoto Tu 6:00pm - 8:30pm *Restricted to students in the Graduate Certificate in Terrorism Analysis, all other students should contact education@start.umd.edu to obtain permission to register.*	Seats (Total: 35) ONLINE

BSST637 **Qualitative Research Methods in Terrorism Studies**

Credits: 3

Grading Method: Regular, Audit

Restriction: Students must be in the Graduate Certificate in Terrorism Analysis program. All other students should contact education@start.umd.edu to obtain permission to register.

Explores research design and qualitative methods using a hands-on approach. The course considers general themes such as the logic of inquiry, the appropriateness of qualitative approaches, as well as more specific topics such as process tracing, archival research, and survey methodology. It also provides students with the opportunity to learn and apply different tools for social science research.

ST01	Catherine Aiken	Seats (Total: 25)
	W 6:00pm - 8:30pm	ONLINE

BSST638J **Special Topics in Terrorism Studies; Disaster Recovery in Japan**

Credits: 3 Grading Method: Regular, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

Contact department for information to register for this course.

BUAC Accounting and Information Assurance — Spring 2019

BUAC706 **Business Ethics for Accountants and Auditors**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program. Credit only granted for: BUAC765 or BUAC706. Formerly: BUAC765.

Considers all facets of business ethics issues within an accounting and auditing context. Ethical theory, corporate social responsibility, and individual decision-making are considered. Some of the applied topics that may be covered in this course include, but are not limited to, intellectual property issues, corporate downsizing, outsourcing, global ethics, crises management, and employment ethics.

0501	Jeffrey Milton	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 12:00pm - 1:50pm	VMH 1511
0502	Jeffrey Milton	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 2:00pm - 3:50pm	VMH 1511

BUAC714 **Forensic Accounting/Auditing**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC792 or BUAC714. Formerly: BUAC792.

Provides a theoretical background and practical application of fraud examinations and corporate investigations. Fraud prevention, detection, investigation, and related matters such as courtroom procedures will be included. Also considered are topics such as FCPA and securities fraud. A wide variety of teaching tools are used.

0501	Ariel Ramirez **Meets March 25, 2019 - May 10, 2019** MW 2:00pm - 3:50pm	Seats (Total: 0) VMH 1505
0502	David Hilton **Meets March 25, 2019 - May 10, 2019** MW 6:00pm - 7:50pm	Seats (Total: 0) VMH 1505

BUAC723 **Essentials of Negotiation**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMO794 or BUAC723. Formerly: BUMO794.

This highly experiential course will improve students' negotiation skills and capacity to acquire and effectively use bargaining power. By using a variety of assessment tools, feedback sources, skill-building exercises, and exercise debriefings, the class will increase students' negotiating self-confidence and improve their capacity to claim value and achieve win-win solutions to individual, team, and organizational problems. The course is designed to enhance students' negotiating self-confidence and improve students' analytical and decision-making skills (e.g., understanding bargaining zones, knowing when an agreement can be made and when to walk away; learning how to prepare for negotiations), interpersonal skills, creativity (e.g., identifying creative solutions to conflict), and persuasive abilities.

0501	Rellie Rozin **Meets March 25, 2019 - May 10, 2019** TuTh 12:00pm - 1:50pm	Seats (Total: 0) VMH 1511
0502	Gosia Langa Basit **Meets March 25, 2019 - May 10, 2019** TuTh 2:00pm - 3:50pm	Seats (Total: 0) VMH 1511

BUAC735 **External Auditing**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC758O or BUAC735. Formerly: BUAC758O.

The study of the independent accountants attest function, generally accepted auditing standards, compliance and substantive tests, and auditor reports and opinions. The course explores audit planning and the role of internal controls and their effect on the auditability of financial statements. The course includes the study of various audit concepts, including how auditors develop an audit strategy, determine materiality in various contexts, set the acceptable level of audit risk, assess control and inherent risk and set detection risk, develop audit objectives, accumulate audit evidence and prepare workpapers, and audit firm quality control.

0501	Rebecca Martin	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 12:00pm - 1:50pm	VMH 1511

Courses with the BUAC prefix are offered only for students in the MS in Accounting program.

BUAC752 **Internal Auditing I: Conceptual and Institutional Framework**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC786 or BUAC752. Formerly: BUAC786.

Provides students with an overview and basic understanding of internal auditing. Internal audit's role in internal control, risk management, business processes and risks, and Sarbanes-Oxley, Section 404 compliance efforts compliance efforts are considered. Internal auditing is presented as an integral part of effective corporate governance. Examples of assurance and consulting activities undertaken by the internal audit function, as well as the sourcing strategy (i.e., full insourcing, co-sourcing or full outsourcing models) are discussed. Students are introduced to internal control theory, test design concepts and internal auditing best practices.

0501	Alan Siegfried, Elizabeth Folsom	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 6:00pm - 7:50pm	VMH 1505

BUAC756 **Informtion Security, Audit and Control**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC790 or BUAC756. Formerly: BUAC790.

Builds on basic information technology (IT) courses, focusing on key issues including IT security, IT controls, and IT auditing. Addressing issues such as auditing a computer information system; assessing risks; identifying control objectives; identifying appropriate audit procedures; learning the concepts and basic features or audit software thereby providing the tools for choosing audit software; conducting an operational audit basic controls over computer information systems; and developing world-class IT control frameworks.

0501	David Sites	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 4:00pm - 5:50pm	VMH 1505

BUAC758B **Special Topics in Accounting and Information Assurance; Valuation for Accounting**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0501	Brent Solomon	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	MW 4:00pm - 5:50pm	VMH 1511

BUAC758F **Special Topics in Accounting and Information Assurance; Intermediate Accounting III**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0501	Stephen Brown	Seats (Total: 0)
	Meets March 23, 2019 - May 10, 2019	
	MW 4:00pm - 5:50pm	VMH 1505

BUAC758G **Special Topics in Accounting and Information Assurance; Accounting Analytics**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0501	Lei Zhou	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 4:00pm - 5:50pm	VMH 1505

BUAC764 **Tax II: Taxation of Corporations & Other Entities**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC758V or BUAC764. Formerly: BUAC758V.

Students have the opportunity to gain an understanding of the basic tax competencies required for determining the appropriate tax structure for businesses; issue identification; active listening; solving tax problems.

0501	Eugene Cantor	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 8:00am - 9:50am	VMH 1511

BUAC767 **Tax IV: Real Estate Taxation**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC758X or BUAC767. Formerly: BUAC758X.

Provides an in-depth examination of the tax provisions and opportunities for planning transactions that involve real estate investments and transactions. The course covers the tax implications of purchasing, holding, and selling real property. These include the determination of tax basis and the treatment of mortgage interest, property taxes, like-kind exchanges, involuntary conversions, sales and dispositions, qualifying property, and capital gains and losses. The various forms used for property transactions will be reviewed in detail.

0501	Jeffrey Milton	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	TuTh 4:00pm - 5:50pm	VMH 1505

BUAC770 **Tax V: International Taxation**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC758Y or BUAC770. Formerly: BUAC758Y.

An introduction to the theory and practice of international taxation. The objective of the course is to provide students with the basic tools to approach international tax topics from a US perspective. The course addresses the fundamentals of U.S. international taxation, but also offers insight into tax planning considerations. Both the U.S. activities of foreign taxpayers, as well as the foreign activities of U.S. taxpayers are explored.

0501	Samuel Handwerger	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 6:30pm - 8:20pm	VMH 1505

BUDT Decision and Information Technologies Spring 2019

BUDT706 **Social Media and Web 2.0**

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)).

Over the past years, social computing technologies such as online communities, blogs, wikis, and social networking systems have become important tools for individuals to seek information, socialize with others, get support, collaborate on work, and express themselves. Increasingly, businesses are trying to leverage web 2.0 by using social computing technologies to communicate with customers, employees, and other business partners or to build new business models. This course will review concepts and principles related to web 2.0 and examine issues and strategies associated with business use of social computing technologies.

WW01	Sivakumar Viswanathan	Seats (Total: 25)
	Meets February 12, 2019 - April 9, 2019	
	Tu 4:30pm - 6:00pm	ONLINE
	Class time/details on ELMs	ONLINE
	Meets: 2/12, 2/19, 02/26, 3/5, 3/26, 4/2, 4/9.	
WW02	Sivakumar Viswanathan	Seats (Total: 25)
	Meets February 14, 2019 - April 11, 2019	
	Th 4:30pm - 6:00pm	ONLINE
	Class time/details on ELMs	ONLINE
	Meets 2/14, 2/21, 2/28, 3/7, 3/28, 4/4, 4/11.	

BUDT732 **Decision Analytics**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI630. Credit only granted for: BMGT732 or BUDT732. Formerly: BMGT732.

Analytical modeling for managerial decisions using a spreadsheet environment. Includes linear and nonlinear optimization models, decision making under uncertainty and simulation models.

GS01	Suresh Acharya	Seats (Total: 50)
	Meets March 25, 2019 - May 10, 2019	
	Th 6:25pm - 10:00pm	BLD2 3032

BUDT758B **Special Topics in Decision, Operations and Information Technologies; Big Data and Artificial Intelligence for Business**

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Kunpeng Zhang	Seats (Total: 0)
	Meets January 22, 2019 - May 10, 2019	
	MW 12:30pm - 1:45pm	VMH 1333
	For MS in Business Analytics students only.	

BUDT758F **Special Topics in Decision, Operations and Information Technologies; Google Online Challenge and Analytics**

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Sivakumar Viswanathan	Seats (Total: 30)
	Meets January 22, 2019 - May 10, 2019	
	MW 5:00pm - 6:15pm	VMH 1333
	For MS in Information Systems students only.	
0502	Sivakumar Viswanathan	Seats (Total: 30)
	Meets January 22, 2019 - May 10, 2019	
	MW 2:00pm - 3:15pm	VMH 1333
	For MS in Information Systems students only.	

BUDT758K **Special Topics in Decision, Operations and Information Technologies; Computer Simulation for Business Applications**

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

For MS in Information Systems students only.

0501	Sujin Kim	Seats (Total: 40)
	Meets January 22, 2019 - May 10, 2019	
	TuTh 11:00am - 12:15pm	VMH 1333
	For MS in Information Systems students only.	

BUDT758N **Special Topics in Decision, Operations and Information Technologies; Business Process Analysis for Information Systems**

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Michael Berecz	Seats (Total: 0)
	Meets January 22, 2019 - May 10, 2019	
	MW 8:00pm - 9:15pm	VMH 1333
	For MS in Information Systems students only. 3 credit version of BUDT703.	
0502	Michael Berecz	Seats (Total: 0)
	Meets January 22, 2019 - May 10, 2019	
	MW 6:30pm - 7:45pm	VMH 1333
	For MS in Information Systems students only. 3 credit version of BUDT703.	

BUDT758T **Special Topics in Decision, Operations and Information Technologies; Data Mining and Predictive Analytics**

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Kislaya Prasad	Seats (Total: 45)
	Meets January 22, 2019 - May 10, 2019	
	TuTh 8:00am - 9:15am	VMH 1333
	For MS in Information Systems students only.	
0502	Kislaya Prasad	Seats (Total: 45)
	Meets January 22, 2019 - May 10, 2019	
	TuTh 9:30am - 10:45am	VMH 1333
	For MS in Information Systems students only.	

0503	Courtney Paulson **Meets January 22, 2019 - May 10, 2019** TuTh 3:30pm - 4:45pm *For MS in Business Analytics students only.*	Seats (Total: 0) VMH 1333
0504	Courtney Paulson **Meets January 22, 2019 - May 10, 2019** TuTh 5:00pm - 6:15pm *For MS in Business Analytics students only.*	Seats (Total: 0) VMH 1333
0505	Gorkem Ozer TuTh 12:30pm - 1:45pm *For MS in Information Systems students only.*	Seats (Total: 45) VMH 1528

BUDT758V **Special Topics in Decision, Operations and Information Technologies; Operations Analytics**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Zhi-Long Chen **Meets March 25, 2019 - May 10, 2019** MW 10:00am - 11:50am *For MS in Business Analytics students only.*	Seats (Total: 0) VMH 1528
0502	Zhi-Long Chen **Meets March 25, 2019 - May 10, 2019** MW 2:00pm - 3:50pm *For MS in Business Analytic students.*	Seats (Total: 0) VMH 1528

BUDT758X **Special Topics in Decision, Operations and Information Technologies; Data Processing and Analysis in Python**

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Sean Barnes **Meets January 22, 2019 - May 10, 2019** TuTh 12:30pm - 1:45pm *For MS in Business Analytics students only.*	Seats (Total: 0) VMH 1333
0502	Sean Barnes **Meets January 22, 2019 - May 10, 2019** TuTh 9:30am - 10:45am *For MS in Business Analytics students only.*	Seats (Total: 0) VMH 1528
0503	Sean Barnes **Meets January 22, 2019 - May 10, 2019** MW 3:30pm - 4:45pm *MS in IS only.*	Seats (Total: 40) VMH 1333

BUDT758Y **Special Topics in Decision, Operations and Information Technologies; Database Management Systems**

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

Contact department for information to register for this course.

BUDT759 **Independent Study in Decision and Information Technologies**

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for masters students in decision and information technologies.

Contact department for information to register for this course.

BUFN Finance Spring 2019

Courses with the BUFN prefix are offered only for students in the Master of Finance and Master of Quantitative Finance programs.

BUFN630 **Valuation in Corporate Finance**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN630, BUFN714, BUFN750, BUFN753, or BMGT730. Formerly: BUFN750.

An advanced topics course in Corporate Finance dealing with valuation. Main topics will be, building pro forma statements, cost of capital, using ratios and comparables to value projects and firms, dicounted cash flow valuations, WACC and APV methods of valuation and Real Option Valuations.

0501	Liu Yang	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 12:00pm - 1:50pm	VMH 1330
0502	Liu Yang	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 10:00am - 11:50am	VMH 1330

BUFN660 **Derivative Securities**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN660, BUFN726, BUFN761 or BUFN773. Formerly: BUFN761.

Standard types of derivatives contracts are presented, and illustrated as to how they are used in practice. The theory of pricing these contracts is then presented in detail. The use of static and dynamic replication strategies, and the concept of no-arbitrage strategies is illustrated in numerous ways. Standard valuation techniques are covered, and standard formulas are presented. The theory is then applied to develop specific pricing and hedging strategies for various types of derivatives on different underlying assets. The management of the exposure of various risks is covered in detail as well.

0501	Claudia Moise	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 8:00am - 9:50am	VMH 1330
0502	Claudia Moise	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 10:00am - 11:50am	VMH 1330

BUFN710 **Financial Strategy for Corporations**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610; or permission of BMGT-Robert H. Smith School of Business. Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUFN751 or BUFN710. Formerly: BUFN751.

An advanced course in corporate finance, focusing on the issues that firms face when they plan to raise external capital from financial markets. The focus is on the financing problems faced by mid-market to large firms and on capital raised from public markets. The forms of external finance vary from simple debt or equity to more complex securities that bundle with an element of risk management.

0501	Pablo Slutzky	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	TuTh 2:00pm - 3:50pm	VMH 1330

BUFN717 **Entrepreneurial Finance and Private Equity**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUFN755 or BUFN717. Formerly: BUFN755.

An advanced topics course in Corporate Finance. The major emphasis is how financiers help growing firms - and in particular young start-ups - using different types of securities at different points in the industry's and firm's life. Financing arrangements and securities studied will include private equity funds and private financings placements, Venture Capital (VC) and preferred equity, Investment Banks through Initial Public Offerings (IPOs), Private equity finds, debt and leveraged buyouts. Students will learn additional techniques that will help them understand how financiers value firms and how to understand, plan and value different financing strategies.

0501	Pablo Slutzky	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	MW 12:00pm - 1:50pm	VMH 1511
0502	Pablo Slutzky	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	MW 10:00am - 11:50am	VMH 1511

BUFN724 **Bank Management**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN724 or BUFN772. Formerly: BUFN772.

Analyze and discuss readings in bank management,with primary focus on the measurement and management of risk, including credit, market, and interest rate risk. Look at the management of liquid reserves. Examine the special nature of financial institutions, incorporating their functions, policies, services, and regulation. Study the evolving nature of the financial services inductry, by reading the financial press and by having outside practitioner speakers. Focus is on U.S. banks.

0501	Clifford Rossi **Meets January 22, 2019 - March 11, 2019** TuTh 12:00pm - 1:50pm	Seats (Total: 0) VMH 1505
0502	Clifford Rossi **Meets January 22, 2019 - March 11, 2019** TuTh 2:00pm - 3:50pm	Seats (Total: 0) VMH 1330

BUFN730 **Applied Equity Analysis**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUFN760 or BUFN730. Formerly: BUFN760.

Students will learn to analyze equity securities using the basic EIC (Economy/Industry/Company) framework used in the financial industry, paying special attention to financial statement analysis. Students also will learn the primary valuation techniques used to estimate market values for equity securities.

0501	Sarah Kroncke **Meets March 25, 2019 - May 10, 2019** TuTh 8:00am - 9:50am	Seats (Total: 0) VMH 1505
0502	Kenneth Fuller **Meets March 25, 2019 - May 10, 2019** TuTh 12:00pm - 1:50pm	Seats (Total: 0) VMH 1505

BUFN732 **Fixed Income Analysis**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUFN732 or BUFN762. Formerly: BUFN762.

Describes important financial instruments which have market values that are sensitive to interest rate movements. Develops tools to analyze interest rate sensitivity and value fixed income securities. Defines and explains the vocabulary of the bond management business.

0501	Haluk Unal **Meets March 25, 2019 - May 10, 2019** MW 10:00am - 11:50am	Seats (Total: 0) VMH 1330
0502	Haluk Unal **Meets March 25, 2019 - May 10, 2019** MW 12:00pm - 1:50pm	Seats (Total: 0) VMH 1330

BUFN736 **Quantitative Investment Strategies**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUFN764 or BUFN736. Formerly: BUFN764.

Provides an introduction to quantitative techniques of selecting equities, as used commonly among long-short equity hedge funds and other quantitative equity asset management companies. Statistical factor models are developed to locate stocks with higher expected returns, based on the observable characteristics of the stocks. Implementation issues, including statistical estimation, backtesting and portfolio construction, are covered, as is performance evaluation.

0501	Russell Wermers **Meets January 22, 2019 - March 11, 2019** MW 2:00pm - 3:50pm	Seats (Total: 0) VMH 1511
0502	Russell Wermers **Meets January 22, 2019 - March 11, 2019** MW 4:00pm - 5:50pm	Seats (Total: 0) VMH 1330

BUFN738 **Investment Fund Management**

(Perm req)

Credits: 3 Grading Method: Regular

Provides second-year Master in Business Administration students with th opportunity to apply the skills learned in finance classes to actual investment decisions through management of an investment fund.

DC06	Kenneth Fuller	Seats (Total: 45)
	Meets January 26, 2019 - May 18, 2019	
	Sa 8:50am - 1:00pm	DC C2
	Meets 1/26, 2/9, 2/23,3/10, 3/30, 4/14, 4/27, 5/11, 5/18.	

BUFN745 **Financial Programming**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN650. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN758E or BUFN745. Formerly: BUFN758E.

Deepens the programming and computing skills necessary in the finance profession, especially for quantitative roles involving big data and modeling. The course aims to familiarize students with large scale financial data and to further develop practical analytical tools.

0501	Claudia Moise	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 6:00pm - 7:50pm	VMH 3505
0502	Claudia Moise	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 4:00pm - 5:50pm	VMH 3505

BUFN750 **Valuation in Corporate Finance**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI640. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUFN630, BUFN714, BUFN750, BUFN753, or BMGT730. Formerly: BUFN714.

An advanced topics course in Corporate Finance dealing with valuation. Main topics will be, building pro forma statements, cost of capital, using ratios and comparables to value projects and firms, dicounted cash flow valuations, WACC and APV methods of valuation and Real Option Valuations.

BA01	Maria Bustamante	Seats (Total: 50)
	Meets January 22, 2019 - March 11, 2019	
	Th 6:25pm - 10:00pm	BA 104

DC06	Maria Bustamante **Meets January 26, 2019 - March 16, 2019** Sa 8:30am - 1:00pm Class time/details on ELMs *Meets 1/26, 2/9, 2/23, 3/9, Final 3/16.*	Seats (Total: 50) DC C3 ONLINE
GS01	Maria Bustamante **Meets January 22, 2019 - March 11, 2019** W 6:25pm - 10:00pm	Seats (Total: 50) BLD2 2032

BUFN751 **Financial Strategy For Corporations**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI640. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUFN751 or BUFN710.

An advanced course in corporate finance, focusing on the issues that firms face when they plan to raise external capital from financial markets. The focus is on the financing problems faced by mid-market to large firms and on capital raised from public markets. The forms of external finance vary from simple debt or equity to more complex securities that bundle with an element of risk management.

DC01	Pablo Slutzky **Meets March 25, 2019 - May 10, 2019** Th 6:25pm - 10:00pm	Seats (Total: 50) DC C1

BUFN758D **Special Topics in Finance; Big Data in Finance**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in finance.

0501	Mark Flood **Meets March 25, 2019 - May 10, 2019** MW 4:00pm - 5:50pm	Seats (Total: 0) VMH 1330
0502	Mark Flood **Meets March 25, 2019 - May 10, 2019** MW 6:00pm - 7:50pm	Seats (Total: 0) VMH 1330

BUFN758M **Special Topics in Finance; Hedge Fund Management**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in finance.

0501	Kenneth Brodkowitz	Seats (Total: 0)
	Meets January 21, 2019 - March 11, 2019	
	TuTh 2:00pm - 3:50pm	VMH 1505

BUFN758R **Special Topics in Finance; Financial Institute Risk Management**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in finance.

0501	Clifford Rossi	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	MW 2:00pm - 3:50pm	VMH 1330

BUFN758Z **Special Topics in Finance; Global Equity Fund**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN759 **Independent Study in Finance**

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for Masters students in finance.

By Department Permission Only.

0501	Clifford Rossi	Seats (Total: 5)
	Meets March 25, 2019 - May 10, 2019	
	Contact instructor or department for details.	
0502	Instructor: TBA	Seats (Total: 5)
	Meets January 22, 2019 - March 11, 2019	
	Contact instructor or department for details.	
0503	Instructor: TBA	Seats (Total: 5)
	Meets January 22, 2019 - March 11, 2019	
	Contact instructor or department for details.	

0504	Instructor: TBA **Meets January 22, 2019 - March 11, 2019** Contact instructor or department for details.	Seats (Total: 5)
0505	Instructor: TBA **Meets January 22, 2019 - March 11, 2019** Contact instructor or department for details.	Seats (Total: 5)
0506	Kenneth Brodkowitz **Meets March 25, 2019 - May 10, 2019** Contact instructor or department for details.	Seats (Total: 5)
0507	Instructor: TBA **Meets March 25, 2019 - May 10, 2019** Contact instructor or department for details.	Seats (Total: 5)
0508	Instructor: TBA **Meets March 25, 2019 - May 10, 2019** Contact instructor or department for details.	Seats (Total: 5)
0509	Instructor: TBA **Meets March 25, 2019 - May 10, 2019** Contact instructor or department for details.	Seats (Total: 5)
0510	Instructor: TBA **Meets March 25, 2019 - May 10, 2019** Contact instructor or department for details.	Seats (Total: 5)
0511	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0512	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0513	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0514	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0515	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

BUFN760 **Applied Equity Analysis**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI640. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUFN730 or BUFN760.

Students will learn to analyze equity securities using the basic EIC (Economy/Industry/Company) framework used in the financial industry, paying special attention to financial statement analysis. Students also will learn the primary valuation techniques used to estimate market values for equity securities.

DC01	Ryan Guttridge **Meets January 22, 2019 - March 11, 2019** Tu 6:25pm - 10:00pm	Seats (Total: 50) DC C1
DC06	Ryan Guttridge **Meets March 30, 2019 - May 18, 2019** Sa 2:00pm - 6:30pm Class time/details on ELMs *Meets 3/30, 4/13, 4/27, 5/11, Final 5/18.*	Seats (Total: 50) DC C3 ONLINE

BUFN763 **Portfolio Management**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN740. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUFN734 or BUFN763.

Provides training that is important in understanding the investment process - the buy side of the financial world. Specifically, the objective is to provide graduate-level instruction in the following topics, both in theory and in using financial markets data to test the basic theory and practice of portfolio choice and equilibrium pricing models and their implications for efficient portfolios.

DC01	Kenneth Fuller **Meets January 22, 2019 - March 11, 2019** Th 6:25pm - 10:00pm	Seats (Total: 50) DC C1

BUFN768A **Special Topics in Finance; Experiential Learning Project**

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768B **Special Topics in Finance; Experiential Learning Project**

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768O **Special Topics in Finance; Experiential Learning Project**

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768P **Special Topics in Finance; Experiential Learning Project**

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768X **Special Topics in Finance; Experiential Learning Project**

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768Y **Special Topics in Finance; Experiential Learning Project**

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BULM Logistics, Business, and Public Policy Spring 2019

Courses with the BULM prefix are offered only for students in the MS in Supply Chain Management program.

BULM724 **Negotiations in Supply Chain Management**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)).

This high experiential course will improve students' negotiation skills and capacity to acquire and effectively use power. By using a variety of assessment tools, feedback sources, skill-building exercises, and exercise debriefings, the class will increase students' negotiating self-confidence and improve their capacity to achieve win-win solutions to individual, team, and organizational problems. The course is designed to enhance students negotiating self confidence and improve students analytical skills, interpersonal skills, creativity (e.g., identifying creative solutions to conflict), and persuasive abilities.

0501	Vijaya Venkataramani	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	TuTh 2:00pm - 3:50pm	VMH 1505

BULM731 **Technology Applications in Supply Chain Management**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

In this course, we introduce the knowledge and skills necessary to quantify the impact of supply chain management decisions on the bottom line. Students will gain an understanding of accounting, finance, production cost, scheduling, and the link between supply chain and overall financial performance.

0501	Hongyi Zhang	Seats (Total: 15)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 10:00am - 11:50am	VMH 3522
0502	Hongyi Zhang	Seats (Total: 15)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 12:00pm - 1:50pm	VMH 3522

BULM735 **Project Management in Dynamic Environments**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

Addresses project management skills that are required by successful managers in increasingly competitive and faster-moving environments. Examines fundamental concepts of successful project management, and the technical and managerial issues, methods, and techniques.

0501	Barnet Corwin	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 2:00pm - 3:50pm	VMH 1528

BULM754 **Global Transportation Management**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BULM758T or BULM754. Formerly: BULM758T.

Introduces transportation as a field of managerial and governmental responsibility and presents the features that make the transportation arena unique and, thus,worthy of advanced study. Each of the five modes of transportation, along with other forms of carriage, will be considered. In addition, the importance of freight transportation within supply chain management will be examined. Issues related to passenger transportation will also be addressed. Throughout the course, particular attention will be paid to the significant impact that transportation has on economic development and growth.

0501	Philip Evers	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 8:00am - 9:50am	VMH 1505

BULM758C **Special Topics in Logistics, Business and Public Policy; Assessing & Managing Supply Chain Risks**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in logistics, business and public policy.

0501	Thomas Corsi, Hongyi Zhang	Seats (Total: 40)
	Meets March 25, 2019 - May 10, 2019	
	TuTh 4:00pm - 5:50pm	VMH 1511

BULM759 **Independent Study in Logistics Management**

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for Masters students in Logistics Management.

Contact department for information to register for this course.

BUMK Marketing Spring 2019

Courses with the BUMK prefix are offered only for students in the MS in Marketing Analytics program.

BUMK716 **Brand Management**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI650. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business.

Brand names are valuable assets for firms. Effective brand management is critical to maintaining the long-term profitability of products and services. Topics include understanding brands from the customer's perspective, building brand equity, measuring brand equity, leveraging brand equity, managing brand portfolios and managing brands over time.

DC06	Roxanne Lefkoff	Seats (Total: 50)
	Meets March 25, 2019 - May 18, 2019	
	Sa 8:30am - 1:00pm	DC C3
	Class time/details on ELMs	ONLINE
	Meets 3/30, 4/13, 4/27, 5/11, Final 5/18.	

BUMK717 **Integrated Marketing Communications**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI650. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business.

Marketing communications are a complex but critical component of marketing strategy. Topics include communication tools: advertising, sales promotions, corporation communications, one-on-one or direct marketing, public relations, internet communications, sponsorship/events marketing, and marketing communcation plans: defining objectives, implementing the plan, and measuring communications effectiveness. Achieving integration in the content, look, and feel of all marketing communications is stressed.

GS01	Jeremy Brown	Seats (Total: 50)
	Meets January 22, 2019 - March 11, 2019	
	Tu 6:25pm - 10:00pm	BLD2 2052

BUMK744 **Marketing Research and Analytics**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758L or BUMK744. Formerly: BUMK758L.

Provides a review of primary data collection methods for marketing data. Students will learn how to design and implement effective confirmatory research. Both direct methods such as surveys and indirect methods such as experiments will be covered. In this hands-on course, students will design and conduct research with target customers, analyze the data, and then present their results to decision makers.

0501	Bruno Jacobs	Seats (Total: 0)
	Meets January 22, 2019 - May 10, 2019	
	TuTh 2:00pm - 3:15pm	VMH 1333
	For MS in Marketing Analytics students only.	

BUMK746 **Data Science for Customer Analytics**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758W or BUMK746. Formerly: BUMK758W.

An introduction to data science and thebasic concepts of database management. The course also provides an overview of the various sources of in house data that are available to many organizations. Students will learn how to work with click stream, scanner panel and social media data. Geo-demographic datasets will be discussed and explored, and techniques for data-fusion will receive ample attention.

0501	Liye Ma	Seats (Total: 0)
	Meets January 22, 2019 - May 10, 2019	
	F 10:00am - 12:30pm	VMH 1335
	For MS in Marketing Analytics students only.	

BUMK758M **Special Topics in Marketing; Integrated Brand Management**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in marketing.

0501	David Godes	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	MW 12:00pm - 1:50pm	VMH 1505
	For MS in Marketing Analytics students only.	

BUMK758P **Special Topics in Marketing; Innovation and Product Development**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in marketing.

BA01	Mary Beth Furst	Seats (Total: 50)
	Meets January 22, 2019 - March 11, 2019	
	M 6:25pm - 10:00pm	BA 103

BUMK758R **Special Topics in Marketing; CRM Analytics**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in marketing.

Masters students only.

0501	Pallassana Kannan	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 12:00pm - 1:50pm	VMH 1505
	For MS in Marketing Analytics students only.	

BUMK758V **Special Topics in Marketing; Marketing for Social Value**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in marketing.

DC01	Rebecca Ratner	Seats (Total: 50)
	Meets March 25, 2019 - May 10, 2019	
	Th 6:25pm - 10:00pm	DC C2

BUMK759 **Independent Study in Marketing**

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for Masters students in Marketing.

Contact department for information to register for this course.

BUMK764 **Business Communications II**

(Perm req)

Credits: 1 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758G or BUMK764. Formerly: BUMK758G.

Teaches students how to communicate quantitative information effectively. Focuses on developing written, spoken and presentation skills.

0501	Christine Schaaf	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	M 2:00pm - 3:50pm	VMH 1330
	For MS in Marketing Analytics students only.	
0502	Christine Schaaf	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	W 2:00pm - 3:50pm	VMH 1330
	For MS in Marketing Analytics students only.	

BUMK776 **Action Learning Project**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758Q or BUMK776. Formerly: BUMK758Q.

Students analyze marketing data, report their findings and provide appropriate recommendations.

0501	Liye Ma	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 4:00pm - 5:50pm	VMH 1511
	For MS in Marketing Analytics students only.	

BUMO Management and Organization Spring 2019

BUMO714 **Competitive and Collaborative Negotiation**

Credits: 2 Grading Method: Regular

Corequisite: BUMO715. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUMO714 or BMGT700.

Increase negotiating self-confidence and improve capacity to achieve win-win solutions to organizational problems. Improve effectiveness at finding creative solutions to conflict.

Non-majors should review their registration eligibility in the statement preceding the BUMO courses.

BA01	Gosia Langa Basit **Meets March 25, 2019 - May 10, 2019** Th 6:25pm - 10:00pm	Seats (Total: 50) BA 103

BUMO751 **Implementing Strategy: Organizing to Compete**

Credits: 2 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in BUSI690. And must have completed MBA core requirements; or permission of BMGT-Robert H. Smith School of Business.

Organizational dynamics of competitive advantage. Impact of alternative organizational structures, planning and control systems, human resource management practices, and executive leadership styles on the implementation of archetypically different strategies.

BA01	Paulo Prochno **Meets March 25, 2019 - May 10, 2019** W 6:25pm - 10:00pm	Seats (Total: 50) BA 103
DC01	Paulo Prochno **Meets January 22, 2019 - March 11, 2019** W 6:25pm - 10:00pm	Seats (Total: 65) DC C2

BUMO754 **Global Strategy**

Credits: 2 Grading Method: Regular

Credit only granted for: BUSI674, BUMO754, or BMGT710.

Focuses on the "strategic" and "organizational" questions that a company must address as it globalizes its footprint. Among the questions that will be addressed are: What are the potential benefits, costs, and risks associated with going abroad? What differentiates a "global" from a "multidomestic" industry? What are the sources of competitive advantage in a global context?

DC06	Anil Gupta **Meets January 26, 2019 - March 16, 2019** Sa 2:00pm - 6:30pm Class time/details on ELMs *Meets 1/26, 2/9, 2/23, 3/9, Final 3/16.*	Seats (Total: 50) DC C3 ONLINE

GS01	Anil Gupta	Seats (Total: 50)
	Meets January 22, 2019 - March 11, 2019	
	M 6:25pm - 10:00pm	BLD2 2032

BUMO758A **Special Topics in Management and Organization; Strategic Growth for Emerging Social & Commercial Ventures**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in management and organization.

GS01	Jonathan Aberman	Seats (Total: 50)
	Meets March 25, 2019 - May 10, 2019	
	W 6:25pm - 10:00pm	BLD2 2052

BUMO758K **Special Topics in Management and Organization; Business Consulting**

Credits: 4 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in management and organization.

DC01	Nicole Coomber	Seats (Total: 50)
	Meets January 22, 2019 - May 10, 2019	
	M 6:25pm - 10:00pm	DC C2

BUMO758T **Special Topics in Management and Organization; Technology Entrepreneurship**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in management and organization.

DC01	Daniel Gordon	Seats (Total: 50)
	Meets March 25, 2019 - May 10, 2019	
	M 6:25pm - 10:00pm	DC C1

BUMO758Z **Special Topics in Management and Organization; Fearless Impact**

Credits: 1-4 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in management and organization.

DC01	Julie Neill	Seats (Total: 50)
	Meets March 25, 2019 - May 10, 2019	
	W 6:25pm - 10:00pm	DC C2

BUMO759 **Independent Study in Management and Organization**

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for Masters students in management and organization.

Contact department for information to register for this course.

BUSI Part-Time MBA Program Spring 2019

BUSI622 **Managing Digital Business Markets**

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business.

The objective is to understand the strategic and tactical issues involved in managing digital businesses and markets. Also, some of the characteristics of digital businesses and markets that make them unique and understand how companies can best manage them will be examined.

BA01	Il-Horn Hann	Seats (Total: 50)
	Meets March 25, 2019 - May 10, 2019	
	M 6:25pm - 10:00pm	BA 103

BUSI640 **Corporate Finance**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)).

Focuses on the valuation of the real assets of firms as well as the valuation of stocks and bonds, the primary financial assets in an economy. While details vary, the conceptual foundations of valuation boil down to three themes: time value of money, no-arbitrage, and systematic risk.

BA01	Richmond Mathews	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	W 6:25pm - 10:00pm	BA 104
DC01	Oya Altinkilic	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	M 6:25pm - 10:00pm	DC C3

DC02	Oya Altinkilic **Meets January 22, 2019 - March 11, 2019** Tu 6:25pm - 10:00pm	Seats (Total: 0) DC C3
GS01	Oya Altinkilic **Meets January 22, 2019 - March 11, 2019** Th 6:25pm - 10:00pm	Seats (Total: 0) BLD2 2032

BUSI650 **Marketing Management**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUSI650 or BMGT612.

Analysis of marketing problems and evaluation of specific marketing efforts regarding the organization's products and services, pricing activities, channel selection, and promotion strategies in both domestic and international markets.

Non-majors should review their registration eligibility in the statement preceding the BUSI courses.

BA01	Daniel Goldsmith **Meets March 25, 2019 - May 10, 2019** M 6:25pm - 10:00pm	Seats (Total: 0) BA 104
DC01	Mary Beth Furst **Meets March 25, 2019 - May 10, 2019** W 6:25pm - 10:00pm	Seats (Total: 0) DC C3
DC02	Mary Beth Furst **Meets March 25, 2019 - May 10, 2019** Th 6:25pm - 10:00pm	Seats (Total: 0) DC C3
GS01	Daniel Goldsmith **Meets March 25, 2019 - May 10, 2019** Tu 6:25pm - 10:00pm	Seats (Total: 0) BLD2 2032

BUSI662 **Leadership and Teamwork**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BMGT600, BUSI662, or BUSM600.

Course examines concepts of team-building and leadership which are critical to managerial success. Topics include leadership, decision making, communication and conflict, work motivation, building effective teams, and organizational change and culture.

0501	Gosia Langa Basit **Meets March 25, 2019 - May 10, 2019** MW 2:00pm - 3:50pm	Seats (Total: 10) VMH 2505

BUSI758B **Special Topics in Business; Data Models and Decisions**

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

Contact department for information to register for this course.

BUSI758D **Special Topics in Business; Data Driven Decision II**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

BA01	Sujin Kim **Meets January 22, 2019 - March 11, 2019** M 6:25pm - 10:00pm	Seats (Total: 0) BA 104
DC01	Maria Bardossy **Meets January 22, 2019 - March 11, 2019** W 6:25pm - 10:00pm	Seats (Total: 0) DC C3
DC02	Maria Bardossy **Meets January 22, 2019 - March 11, 2019** Th 6:25pm - 10:00pm	Seats (Total: 0) DC C4
GS01	Inbal Shenberger **Meets January 22, 2019 - March 11, 2019** Tu 6:25pm - 10:00pm	Seats (Total: 0) BLD2 2032

BUSI758W **Special Topics in Business; Corporate Finance II**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

BA01	Albert Crosby **Meets March 25, 2019 - May 10, 2019** W 6:25pm - 10:00pm	Seats (Total: 0) BA 104
DC01	Geoffrey Tate **Meets March 25, 2019 - May 10, 2019** M 6:25pm - 10:00pm	Seats (Total: 0) DC C3
DC02	Geoffrey Tate **Meets March 25, 2019 - May 10, 2019** Tu 6:25pm - 10:00pm	Seats (Total: 0) DC C3
GS01	Geoffrey Tate **Meets March 25, 2019 - May 10, 2019** Th 6:25pm - 10:00pm	Seats (Total: 0) BLD2 2032

BUSI759 **Independent Study in Business**

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for Masters students in Business.

DC01	Bennet Zelner **Meets March 25, 2019 - May 10, 2019** Contact instructor or department for details.	Seats (Total: 10)

BUSI764 **Business Law for Managers**

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI764 or BUAC721.

Survey of United States legal institutions and processes as well as substantive areas of the law that affect business. Examination of tort and contract law, the legal forms of business organization and legal liability and major regulatory laws that affect business.

BA01	Gideon Mark **Meets January 22, 2019 - March 11, 2019** Tu 6:25pm - 10:00pm	Seats (Total: 50) BA 103

GS01	Jennifer Gershberg	Seats (Total: 50)
	Meets March 25, 2019 - May 10, 2019	
	M 6:25pm - 10:00pm	BLD2 2052

BUSI771 **New Venture Financing**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI640; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BMGT740 or BUSI771. Formerly: BMGT740.

Development of skills for financing new ventures (both small and potentially large). Exploration of various funding sources. Criteria used in evaluation and decision process, including commercial banks, venture capital companies, small business investment companies, underwriters, private placement-financial consultants, mortgage bankers, and small business innovative research grants (U.S. Government).

DC01	Jonathan Aberman	Seats (Total: 50)
	Meets March 25, 2019 - May 10, 2019	
	Tu 6:25pm - 10:00pm	DC C2

BUSI785 **Project Management in Dynamic Environments**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business.

Addresses project management skills that are required by successful managers in increasingly competitive and faster-moving environments. Examines fundamental concepts of successful project management, and the technical and managerial issues, methods, and techniques.

0501	Barnet Corwin	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	TuTh 2:00pm - 3:50pm	VMH 1528
	For MS in Information Systems students only.	
0502	Barnet Corwin	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	TuTh 4:00pm - 5:50pm	VMH 1528
	For MS in Information Systems students only.	

BUSI798B **Global Business Experience; Doing Business in Brazil**

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

Contact department for information to register for this course.

BUSI798C **Global Business Experience; Doing Business in China**

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

Contact department for information to register for this course.

BUSI798E **Global Business Experience; Doing Business in Europe**

Credits: 3 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

Contact department for information to register for this course.

BUSI798J **Global Business Experience; Doing Business in South Africa**

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

Contact department for information to register for this course.

BUSI798M **Global Business Experience; Doing Business in the UAE**

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

Contact department for information to register for this course.

BUSI798Y **Global Business Experience; Doing Business in Japan and Singapore**

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

Contact department for information to register for this course.

BUSI799 **Masters Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

For Smith School MS Students only.

Contact department for information to register for this course.

BUSM Full-Time MBA Program Spring 2019

BUSM614 **Strategic Management**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI690 or BUSM614.

Analyze and identify profit opportunities and threats in different industry and competitive environments; Analyze and identify a firm's valuable assets, resources and capabilities and how they might be protected, leveraged, and extended in the market; Learn how to organize your company to be the best prepared to adapt its strategy over time as the market environment changes; and how to use organic growth as well as mergers, acquisitions, joint ventures, alliances, and divestitures to ensure that the firm maintians the proper scale and scope to compete effectively over time.

0101	Paulo Prochno **Meets March 25, 2019 - May 10, 2019** MW 10:00am - 11:50am	Seats (Total: 0) VMH 2505
0201	Paulo Prochno **Meets March 25, 2019 - May 10, 2019** MW 8:00am - 9:50am	Seats (Total: 0) VMH 2505

BUSM624 **Operations Management**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI634 or BUSM624.

Operations management is concerned with efficient and effective design and operation of business processes for delivering products and/or services. Emphasis is given to process analysis and design, capacity management and bottlenecks, waiting lines and the impact of uncertainty in process performance, quality management, lean, six-sigma, and revenue management.

0101	Anand Anandalingam **Meets January 22, 2019 - March 11, 2019** MW 8:00am - 9:50am	Seats (Total: 0) VMH 2505

0201	Anand Anandalingam	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 10:00am - 11:50am	VMH 2505

BUSM701 **Marketing Research Methods**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSM606; and BUSM612. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK701 or BUSM701. Formerly: BUMK701.

The process of acquiring, classifying and interpreting primary and secondary marketing data needed for intelligent, profitable marketing decisions. Evaluation of the appropriateness of alternative methodologies, such as the inductive, deductive, survey, observational, and experimental. Recent developments in the systematic recording and use of internal and external data needed for marketing decisions.

0101	Liye Ma	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 10:00am - 11:50am	VMH 1505

BUSM702 **Consumer Behavior**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSM612. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK715 or BUSM702.

Analysis of customer decision-making and how marketing strategy can be used to influence those decisions. The framework is a buyer behavior model, in which concepts from psychology, sociology, and economics are applied to individual and organizational purchase decisions. Marketing strategies of leading firms in consumer products, technology, and services (including internet services) are analyzed using a variety of case study formats. Focus is consumer behavior; however, principles can also be applied to the decision-making of business.

0101	Rebecca Ratner	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 2:00pm - 3:50pm	VMH 2511

BUSM708 **Independent Study in Business**

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for Masters students in Business.

Restriction: Permission of department.

0101	Joseph Bailey **Meets March 25, 2019 - May 10, 2019** Contact instructor or department for details.	Seats (Total: 10)
0201	Nicole Coomber **Meets March 25, 2019 - May 10, 2019** Contact instructor or department for details.	Seats (Total: 10)
0301	Myeong-Gu Seo **Meets March 25, 2019 - May 10, 2019** Contact instructor or department for details.	Seats (Total: 10)

BUSM713 **Market Forecasting**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSM606 and BUSM612. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

Students will learn a number of market forecasting methods, each appropriate for different contexts. The majority of this course focuses on quantitative modeling techniques based on established statistical methods. We also cover non-statistical methods that are often used when empirical data is scarce. This is a very hands-on class where students will apply the forecasting methods learned to real data.

0101	Wendy Moe **Meets March 25, 2019 - May 10, 2019** MW 2:00pm - 3:50pm	Seats (Total: 0) VMH 1511

BUSM733 **Valuation in Corporate Finance**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSM610. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN750 or BUSM733.

An advanced topics course in Corporate Finance dealing with valuation. Main topics will be, building pro forma statements, cost of capital, using ratios and comparables to value projects and firms, dicounted cash flow valuations, WACC and APV methods of valuation and Real Option Valuations.

0101	Maria Bustamante	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 10:00am - 11:50am	VMH 2511

BUSM735 **Financial Strategy for Corporations**

Credits: 2 Grading Method: Regular

Prerequisite: BUSM610. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN751 or BUSM735.

An advanced course in corporate finance, focusing on the issues that firms face when they plan to raise external capital from financial markets. The focus is on the financing problems faced by mid-market to large firms and on capital raised from public markets. The forms of external finance vary from simple debt or equity to more complex securities that bundle with an element of risk management.

0101	Pablo Slutzky	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	TuTh 10:00am - 11:50am	VMH 2505

BUSM737 **Applied Equity Analysis**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSM610. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN760 or BUSM737.

Students will learn to analyze equity securities using the basic EIC (Economy/Industry/Company) framework used in the financial industry, paying special attention to financial statement analysis. Students also will learn the primary valuation techniques used to estimate market values for equity securities.

0101	Sarah Kroncke	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	TuTh 2:00pm - 3:50pm	VMH 2511

BUSM738A **Investment Fund Management; Mayer Fund**

(Perm req)

Credits: 3 Grading Method: Regular

Provides second-year Master in Business Administration students with the opportunity to apply the skills learned in finance classes to actual investment decisions through management of an investment fund.

0101	Sarah Kroncke	Seats (Total: 15)
	Meets January 22, 2019 - May 10, 2019	
	TuTh 10:00am - 11:50am	VMH 2509

BUSM744 **Portfolio Management**

Credits: 2 Grading Method: Regular

Prerequisite: BUSM610; and BUSM731. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN763 or BUSM744.

Provides training that is important in understanding the investment process - the buy side of the financial world. Specifically, the objective is to provide graduate-level instruction in the following topics, both in theory and in using financial markets data to test the basic theory and practice of portfolio choice and equilibrium pricing models and their implications for efficient portfolios.

0201	Instructor: TBA	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 2:00pm - 3:50pm	Location: TBA

BUSM750 **Project Management in Dynamic Environments**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI785 or BUSM750.

Addresses project management skills that are required by successful managers in increasingly competitive and faster-moving environments. Examines fundamental concepts of successful project management, and the technical and managerial issues, methods, and techniques.

0101	Barnet Corwin	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 4:00pm - 5:50pm	VMH 2511

BUSM754 **Competitive and Collaborative Negotiation**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMO714 or BUSM754.

Increase negotiating self-confidence and improve capacity to achieve win-win solutions to organizational problems. Improve effectiveness at finding creative solutions to conflict.

0101	Vijaya Venkataramani	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 2:00pm - 3:50pm	VMH 2505
0201	Vijaya Venkataramani	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 4:00pm - 5:50pm	VMH 2505

BUSM758 **Special Topics in Business**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Instructor: TBA	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 2:00pm - 3:50pm	Location: TBA

BUSM758A **Special Topics in Business; Angel Investing**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Joseph Bailey	Seats (Total: 0)
	Meets January 22, 2019 - May 10, 2019	
	F 10:00am - 11:50am	VMH 2509

BUSM758B **Special Topics in Business**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Claudia Moise	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 2:00pm - 3:50pm	VMH 1505

BUSM758D **Special Topics in Business; Managing Supply Chains: Models and Analysis**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Zhi-Long Chen	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	MW 4:00pm - 5:50pm	VMH 2511

BUSM758E **Special Topics in Business; International Economics for Managers**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Wilbur Chung	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 10:00am - 11:50am	VMH 1511

BUSM758G **Special Topics in Business; Global Trade Logistics**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Gary Cohen	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	TuTh 8:00am - 9:50am	VMH 2511

BUSM758L **Special Topics in Business; Leading Strategically**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Neta Moye	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	MW 8:00am - 9:50am	VMH 1505

0201	Neta Moye	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	MW 10:00am - 11:50am	VMH 1505

BUSM758M **Special Topics in Business; Integrated Brand Management**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	David Godes	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	TuTh 10:00am - 11:50am	VMH 1505

BUSM758O **Special Topics in Business; Navigating Organizational Networks**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Kathryn Bartol	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	MW 2:00pm - 3:50pm	VMH 2511

BUSM758Y **Special Topics in Business; Managing Organizational Change**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Myeong-Gu Seo	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 8:00am - 9:50am	VMH 1505

BUSM758Z **Special Topics in Business; Integrative Capstone**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Gary Cohen	Seats (Total: 0)
	Meets January 22, 2019 - May 10, 2019	
	Th 4:00pm - 5:50pm	VMH 2505

0201	Gary Cohen	Seats (Total: 0)
	Meets January 22, 2019 - May 10, 2019	
	Th 2:00pm - 3:50pm	VMH 2505

BUSM761 **Data Mining and Predictive Analytics**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSM606. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUDT733 or BUSM761. Formerly: BUDT733.

Data mining techniques and their use in business decision making. A hands-on course that provides an understanding of the key methods of data visualization, exploration, classification, prediction, time series forecasting, and clustering.

0101	Margret Bjarnadottir	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 10:00am - 11:50am	VMH 2511
0201	Margret Bjarnadottir	Seats (Total: 0)
	Meets January 22, 2019 - March 11, 2019	
	MW 8:00am - 9:50am	VMH 2511

BUSM762 **Decision Analytics**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSM606. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUDT732 or BUSM762.

Analytical modeling for managerial decisions using a spreadsheet environment. Includes linear and nonlinear optimization models, decision making under uncertainty and simulation models.

0101	Sujin Kim	Seats (Total: 0)
	Meets March 25, 2019 - May 10, 2019	
	MW 10:00am - 11:50am	VMH 2511

BUSM788B **Global Business Experience; Doing Business in Brazil**

(Perm req)

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

Contact department for information to register for this course.

BUSM788C **Global Business Experience; Doing Business in China**

(Perm req)

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

Contact department for information to register for this course.

BUSM788J **Global Business Experience; Doing Business in South Africa**

(Perm req)

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

Contact department for information to register for this course.

BUSM788M **Global Business Experience; Doing Business in the UAE**

(Perm req)

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

Contact department for information to register for this course.

BUSM788Y **Global Business Experience; Doing Business in Japan and Singapore**

(Perm req)

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

Contact department for information to register for this course.

BUSM798Q **Business Consulting; Business Consulting I**

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Nicole Coomber	Seats (Total: 0)
	Meets January 22, 2019 - May 10, 2019	
	F 12:00pm - 1:50pm	VMH 1333

BUSO Online MBA Program Spring 2019

BUSO616 **Managerial Accounting**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI610; or BUSO602; or BUSM602. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI611, BUSM616 or BUSO616.

Use of accounting data in corporate planning and control. Cost-volume- profit analysis, budgeting, pricing decisions and cost data, transfer pricing, activity-based management, performance measures, and standard costing.

SO11	Stephen Brown **Meets January 21, 2019 - March 9, 2019** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO12	Stephen Brown **Meets January 21, 2019 - March 9, 2019** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO13	Tharinda W Ranasinghe **Meets January 21, 2019 - March 9, 2019** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO15	Eugene Cantor **Meets January 21, 2019 - March 9, 2019** Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO16	Eugene Cantor **Meets January 21, 2019 - March 9, 2019** Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO17	Samuel Handwerger **Meets January 21, 2019 - March 9, 2019** Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE

SO18	Samuel Handwerger **Meets January 21, 2019 - March 9, 2019** Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE

BUSO620 **Strategic Information Systems**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSO620, BUSI621, BUSM621 or EMBA620.

Use of information technology to achieve competitive advantage, efficient operations, and effective decision making. Analysis of functions of information technology and its impact on competitive strategy and organizational operations.

SO11	Peter Weiss **Meets March 11, 2019 - April 27, 2019** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO12	Peter Weiss **Meets March 11, 2019 - April 27, 2019** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO13	Robert Smith **Meets March 11, 2019 - April 27, 2019** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO14	Robert Smith **Meets March 11, 2019 - April 27, 2019** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO16	Patrick Stack **Meets March 11, 2019 - April 27, 2019** Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

SO17	Patrick Stack **Meets March 11, 2019 - April 27, 2019** Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO18	Raymond Barber **Meets March 11, 2019 - April 27, 2019** Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

BUSO624 **Operations Management**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI634, BUSM624 or BUSO624.

Operations management is concerned with efficient and effective design and operation of business processes for delivering products and/or services. Emphasis is given to process analysis and design, capacity management and bottlenecks, waiting lines and the impact of uncertainty in process performance, quality management, lean, six-sigma, and revenue management.

SO21	Yi Xu **Meets January 21, 2019 - March 9, 2019** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO22	Yi Xu **Meets January 21, 2019 - March 9, 2019** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO23	Ming Chen **Meets January 21, 2019 - March 9, 2019** W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO24	Yi Xu **Meets January 21, 2019 - March 9, 2019** Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE

SO25	Yi Xu **Meets January 21, 2019 - March 9, 2019** Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE

BUSO626 **The Global Economic Environment**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI683, BUSM626 or BUSO626.

Relationship between national and international economic environments. Determinants of output, interest rates, prices and exchange rates. Analysis of effect of economic policies (fiscal, monetary, trade, tax) on the firm and the economy.

SO11	Craig Hovey **Meets January 21, 2019 - March 9, 2019** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO12	Craig Hovey **Meets January 21, 2019 - March 9, 2019** M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO13	Ioan Daraban **Meets January 21, 2019 - March 9, 2019** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO14	Ioan Daraban **Meets January 21, 2019 - March 9, 2019** M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO15	Bennet Zelner **Meets January 21, 2019 - March 9, 2019** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE

SO16	Bennet Zelner **Meets January 21, 2019 - March 9, 2019** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO17	Ioan Daraban **Meets January 21, 2019 - March 9, 2019** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO18	Ioan Daraban **Meets January 21, 2019 - March 9, 2019** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE

BUSO700 **Fundamentals of Business**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

This course introduces students to the language of business. Topics covered include financial accounting, financial management, data models, strategy, leadership and teamwork, and a brief action learning project on innovation. Pre-work includes the DISC assessment, and a requires a passing grade on a spreadsheet pre-work course.

SO91	Judy Frels **Meets January 17, 2019 - January 19, 2019** ThFSa 8:00am - 8:00pm	Seats (Total: 100) Location: TBA

BUSO702 **Action Learning Project I**

Credits: 1 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

The objective of the Action Learning Project I and II is for teams to identify and solve business problems that currently exist in organizations and in the process, to provide significant value to organizations and their stakeholders. The experience of solving business problems will both enable students to apply knowledge learned in core courses and to develop the wisdom, skills, and problem-solving capabilities of team members. This course is designed to promote independent learning. Faculty members will offer mini-modules on key themes such as team dynamics, client relations and consulting protocols but their primary role will be to facilitate the ALP process and serve as consultants to the student teams.Selecting the right project and defining it unambiguously sets the stage for the rest of the ALP process improvement or problem solving effort, ultimately leading to a relevant, value added and well-received deliverable. Poor problem selection creates longer-term problems for both ALP teams and the sponsoring organization and can reduce or impede the quality of your learning experience. For this reason, we will lay the foundation for the final selection of projects during this term (a) soliciting ideas from all students, and (b) offering feedback to identify and nurture the most promising ideas.

SO22	Neta Moye **Meets March 11, 2019 - April 27, 2019** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO23	Protiti Dastidar **Meets March 11, 2019 - April 27, 2019** M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO24	Neta Moye **Meets March 11, 2019 - April 27, 2019** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO25	Neta Moye **Meets March 11, 2019 - April 27, 2019** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO26	Toby Egan **Meets March 11, 2019 - April 27, 2019** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE

SO27	Toby Egan **Meets March 11, 2019 - April 27, 2019** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE

BUSO704 **Ethical Leadership**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: EMBA678 or BUSO704.

This course will examine business ethics issues across a variety of business contexts. You will learn toapply a number of ethical theories to business problems, primarily through case studies and discussion.The goal is for you to engage actively with the material and understand the complexity of many ethical dilemmas that businesses and business owners face. Often in ethics there is not one right answer; rather,businesses and individuals must wrestle with ethical principles that may compete and conflict with one another in arriving at a resolution. We will explore conflicts between personal values and organizationalgoals, ethics as part of a business strategy, and various ethical frameworks businesses may use in understanding and implementing ethical approaches to problems.

SO21	David Weber **Meets January 21, 2019 - February 23, 2019** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO22	David Weber **Meets January 21, 2019 - February 23, 2019** M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO23	Jon Crocker **Meets January 21, 2019 - February 23, 2019** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE

SO24	Jon Crocker **Meets January 21, 2019 - February 23, 2019** M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO25	David Weber **Meets January 21, 2019 - February 23, 2019** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO26	David Weber **Meets January 21, 2019 - February 23, 2019** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE

BUSO711 **Executive Powers and Negotiation**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMO714, BUSM754 or BUSO711.

Increase negotiating self-confidence and improve capacity to achieve win-win solutions to organizational problems. Improve effectiveness at finding creative solutions to conflict.

SO21	Cynthia Stevens **Meets March 11, 2019 - April 27, 2019** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO22	Cynthia Stevens **Meets January 21, 2019 - February 23, 2019** Th 7:00pm - 8:30pm Class time/details on ELMs *This section is restricted to Cohort 1703 Option 2 students only.*	Seats (Total: 25) ONLINE ONLINE

SO23	Elizabeth Berney **Meets March 11, 2019 - April 27, 2019** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO24	Jon Crocker **Meets March 11, 2019 - April 27, 2019** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO25	Gosia Langa Basit **Meets March 11, 2019 - April 27, 2019** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO26	Elizabeth Berney **Meets March 11, 2019 - April 27, 2019** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

BUSO714 **International Business**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BMGT794, BUSI761 or BUSO714.

The international business environment as it affects company policy and procedures. In-depth analysis and comprehensive case studies of the business functions undertaken in international operations.

SO21	Gary Cohen **Meets January 2, 2019 - January 19, 2019** MW 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO22	Gary Cohen **Meets January 2, 2019 - January 19, 2019** MW 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

SO23	Jon Crocker **Meets January 2, 2019 - January 19, 2019** MW 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO24	Jon Crocker **Meets January 2, 2019 - January 19, 2019** MW 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO25	Michael Ward **Meets January 2, 2019 - January 19, 2019** TuTh 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO26	Michael Ward **Meets January 2, 2019 - January 19, 2019** TuTh 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

BUSO733 **Data Mining and Predictive Analytics**

Credits: 2 Grading Method: Regular

Prerequisite: BUSM606; or BUSO607; or BUSI630. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUDT733, BUSM761 or BUSO733.

Data mining techniques and their use in business decision making. A hands-on course that provides an understanding of the key methods of data visualization, exploration, classification, prediction, time series forecasting, and clustering.

SO31	Margret Bjarnadottir **Meets March 11, 2019 - April 27, 2019** Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

SO32	Margret Bjarnadottir	Seats (Total: 25)
	Meets March 11, 2019 - April 27, 2019	
	Th 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

BUSO740 **Customer Equity Management**

Credits: 2 Grading Method: Regular

Prerequisite: BUSI650; or BUSM612; or BUSO612. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK722, BUMK750 or BUSO740.

This course focuses on managing customers of a business, whether in B2B or B2C space, as a portfolio of equity. It provides an understanding of the current and future value of customers to the business. Topics include selective acquisition, development, and retention of customers using latest developments in information technology.

SO31	Pallassana Kannan	Seats (Total: 25)
	Meets March 11, 2019 - April 27, 2019	
	W 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE
SO32	Pallassana Kannan	Seats (Total: 25)
	Meets March 11, 2019 - April 27, 2019	
	W 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

BUSO752 **Innovative Solutions to Supply Chain Challenges**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

This course is designed to provide you with practical challenges to implement innovative and effective actions to achieve the goalof enhanced supply chain operations. You will be challenged to function as a supply chain executive in charge of major decisions.The course is designed to be a mix of action-focused learning combined with some very recent and interesting examples of howcompanies are addressing their own supply chain challenges in innovative ways.

SO31	Thomas Corsi **Meets March 11, 2019 - April 27, 2019** W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

BUSO758L **Special Topics in Business; Data Analysis**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

SO11	Pallassana Kannan **Meets March 11, 2019 - April 27, 2019** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO12	Pallassana Kannan **Meets March 11, 2019 - April 27, 2019** M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO13	Alan Briggs **Meets March 11, 2019 - April 27, 2019** M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO15	Lingling Zhang **Meets March 11, 2019 - April 27, 2019** M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO16	Sujin Kim **Meets March 11, 2019 - April 27, 2019** Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO17	Sujin Kim **Meets March 11, 2019 - April 27, 2019** Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

SO18	Alan Briggs	Seats (Total: 24)
	Meets March 11, 2019 - April 27, 2019	
	Tu 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE
SO19	Alan Briggs	Seats (Total: 24)
	Meets March 11, 2019 - April 27, 2019	
	Tu 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BUSO758V **Special Topics in Business; Corporate Valuation**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

SO31	Joseph Perfetti	Seats (Total: 25)
	Meets March 11, 2019 - April 13, 2019	
	W 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BUSO758Z **Special Topics in Business; Integrative Business Simulation**

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

SO92	Judy Frels	Seats (Total: 100)
	Meets May 3, 2019 - May 5, 2019	
	FSaSu 8:00am - 8:00pm	Location: TBA

BUSO781 **The Impact of Taxation on Business Entities**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

Tax Strategies for Business Planning and Investment provides a study of how federal and state taxes affect business strategy. The course focuses on the taxation of business entities and transactions. Concepts of taxing jurisdictions, taxes as transaction costs, maxims of income tax planning and jurisdictional issues in taxation are reviewed with particular emphasis on their impact on business operations. The course examines the choice of business entity, examining the taxation of flow-through entities (partnerships, LLCs, and S corporations) and C corporations (separately taxed entities). The course also examines investment and personal financial planning.

SO31	Eugene Cantor	Seats (Total: 25)
	Meets March 11, 2019 - April 27, 2019	
	Th 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

CBMG Cell Biology & Molecular Genetics Spring 2019

CBMG688C **Special Topics in Cell Biology and Molecular Genetics; Research Experiences**

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subject in the topics of Cell Biology and Molecular Genetics.

0101	Kevin McIver	Seats (Total: 40)
	Contact instructor or department for details.	

CBMG688F **Special Topics in Cell Biology and Molecular Genetics; Gene Expression**

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subject in the topics of Cell Biology and Molecular Genetics.

0101	Wade Winkler, Daniel Dwyer	Seats (Total: 35)
	Meets January 28, 2019 - March 16, 2019	
	TuTh 4:00pm - 6:00pm	BRB 3101

CBMG688G **Special Topics in Cell Biology and Molecular Genetics; Computational Virology**

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subject in the topics of Cell Biology and Molecular Genetics.

0101	Brian Pierce	Seats (Total: 15)
	Meets March 18, 2019 - May 14, 2019	
	MW 4:00pm - 5:50pm	MCB 2119

CBMG688I **Special Topics in Cell Biology and Molecular Genetics; Genetic Analysis**

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subject in the topics of Cell Biology and Molecular Genetics.

0101	Stephen Mount	Seats (Total: 30)
	Meets March 18, 2019 - May 14, 2019	
	TuTh 4:00pm - 6:00pm	MCB 2119

CBMG688L **Special Topics in Cell Biology and Molecular Genetics; Microbial Pathogenesis**

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subject in the topics of Cell Biology and Molecular Genetics.

0101	Kevin McIver, Volker Briken	Seats (Total: 0)
	Meets January 28, 2019 - March 16, 2019	
	MW 8:00am - 10:00am	MCB 1123

CBMG688O **Special Topics in Cell Biology and Molecular Genetics; The Role of Thoroughly Conscious Ignorance on the Advancement of Science**

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subject in the topics of Cell Biology and Molecular Genetics.

0101	Jose Feijo	Seats (Total: 15)
	Meets January 28, 2019 - March 16, 2019	
	MW 4:00pm - 5:50pm	MCB 1123

CBMG688Q **Special Topics in Cell Biology and Molecular Genetics; Molecular Vaccinology-Responding to Current and Emerging Diseases**

Credits: 2

Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subject in the topics of Cell Biology and Molecular Genetics.

0101	Kenneth Frauwirth, Peter Hobart	Seats (Total: 12)
	Meets January 28, 2019 - March 15, 2019	
	MW 4:00pm - 5:50pm	MCB 2119

CBMG688R **Special Topics in Cell Biology and Molecular Genetics; Molecular Vaccinology - Research Paper**

Credits: 1

Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subject in the topics of Cell Biology and Molecular Genetics.

Prerequisite/Co-requisite: CBMG688Q.

0101	Peter Hobart, Kenneth Frauwirth	Seats (Total: 12)
	Meets March 18, 2019 - May 14, 2019	
	Contact instructor or department for details.	

CBMG688X **Special Topics in Cell Biology and Molecular Genetics; Virology Program**

Credits: 2

Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subject in the topics of Cell Biology and Molecular Genetics.

0101	Anne Simon	Seats (Total: 20)
	F 3:00pm - 5:00pm	HJP 1216

CBMG699 **Special Problems in Cell Biology and Molecular Genetics**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Emphasis is placed on research and discussion of current problems in th area of Cell Biology and Molecular Genetics.

Contact department for information to register for this course.

CBMG699C **Special Problems in Cell Biology and Molecular Genetics; Cell Biology**

Credits: 3 Grading Method: Regular, Audit

Emphasis is placed on research and discussion of current problems in th area of Cell Biology and Molecular Genetics.

0101	Vera Stupina, Sougata Roy	Seats (Total: 8)
	TuTh 11:00am - 12:15pm	MCB 1207

CBMG699D **Special Problems in Cell Biology and Molecular Genetics; Molecular Genetics: Bioinformatics and Computation Biology**

Credits: 1 Grading Method: Regular, Audit

Emphasis is placed on research and discussion of current problems in th area of Cell Biology and Molecular Genetics.

0101	Stephen Mount	Seats (Total: 20)
	Contact instructor or department for details.	

CBMG699W **Special Problems in Cell Biology and Molecular Genetics; Immunology**

Credits: 3 Grading Method: Regular

Emphasis is placed on research and discussion of current problems in th area of Cell Biology and Molecular Genetics.

0101	David Mosser, Kenneth Frauwirth	Seats (Total: 7)	
	MW 12:00pm - 12:50pm	BPS 1243	
	F 2:00pm - 2:50pm	PLS 1111	Discussion

CBMG699X **Special Problems in Cell Biology and Molecular Genetics; Host Pathogen Interactions**

Credits: 1 Grading Method: Regular, Audit

Emphasis is placed on research and discussion of current problems in th area of Cell Biology and Molecular Genetics.

0101	David Mosser	Seats (Total: 20)
	F 9:00am - 10:30am	BRB 3101

CBMG699Z **Special Problems in Cell Biology and Molecular Genetics; Protein Translation**

Credits: 1 Grading Method: Regular, Audit

Emphasis is placed on research and discussion of current problems in th area of Cell Biology and Molecular Genetics.

0101	Jonathan Dinman F 9:30am - 10:30am	Seats (Total: 10) MCB 1121

CBMG799 **Masters Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Master's Thesis Research in Cell Biology and Molecular Genetics.

Contact department for information to register for this course.

CBMG898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Pre-candidacy Research.

Contact department for information to register for this course.

CBMG899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Doctoral Dissertation Research.

Contact department for information to register for this course.

CCJS Criminology and Criminal Justice Spring 2019

CCJS100 **Introduction to Criminal Justice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

Introduction to the administration of criminal justice in a democratic society, with emphasis on the theoretical and historical development of law enforcement. The principles of organization and administration for law enforcement; functions and specific activities; planning and research; public relations; personnel and training; inspection and control; direction; policy formulation.

0101	Justine Madoo, Benjamin Pheasant MW 9:00am - 9:50am M 2:00pm - 2:50pm	Seats (Total: 30) LEF 2205 ASY 3219	 Discussion

0102	Justine Madoo, Benjamin Pheasant MW 9:00am - 9:50am M 10:00am - 10:50am	Seats (Total: 30) LEF 2205 ASY 3215	Discussion
0103	Justine Madoo, Benjamin Pheasant MW 9:00am - 9:50am M 12:00pm - 12:50pm	Seats (Total: 30) LEF 2205 ASY 3219	Discussion
0104	Benjamin Pheasant, Justine Madoo MW 9:00am - 9:50am M 1:00pm - 1:50pm	Seats (Total: 30) LEF 2205 TWS 1106	Discussion
0105	Benjamin Pheasant, Justine Madoo MW 9:00am - 9:50am Tu 9:30am - 10:20am	Seats (Total: 30) LEF 2205 SQH 2120	Discussion
0106	Benjamin Pheasant, Justine Madoo MW 9:00am - 9:50am Tu 11:00am - 11:50am	Seats (Total: 30) LEF 2205 LEF 1220	Discussion
0107	Benjamin Pheasant, Justine Madoo MW 9:00am - 9:50am Tu 12:30pm - 1:20pm	Seats (Total: 30) LEF 2205 HBK 0109	Discussion
0108	Benjamin Pheasant, Justine Madoo MW 9:00am - 9:50am Tu 2:00pm - 2:50pm	Seats (Total: 30) LEF 2205 HBK 0105	Discussion
0201	Justine Madoo, Benjamin Pheasant MW 12:00pm - 12:50pm W 11:00am - 11:50am	Seats (Total: 30) SKN 0200 LEF 1220	Discussion
0202	Benjamin Pheasant, Justine Madoo MW 12:00pm - 12:50pm W 10:00am - 10:50am	Seats (Total: 30) SKN 0200 LEF 1201	Discussion
0203	Justine Madoo, Benjamin Pheasant MW 12:00pm - 12:50pm W 1:00pm - 1:50pm	Seats (Total: 30) SKN 0200 LEF 1201	Discussion

0204	Justine Madoo, Benjamin Pheasant MW 12:00pm - 12:50pm W 2:00pm - 2:50pm	Seats (Total: 30) SKN 0200 LEF 0135	Discussion
0205	Justine Madoo, Benjamin Pheasant MW 12:00pm - 12:50pm Th 9:30am - 10:20am	Seats (Total: 30) SKN 0200 WDS 1114	Discussion
0206	Benjamin Pheasant, Justine Madoo MW 12:00pm - 12:50pm Th 11:00am - 11:50am	Seats (Total: 30) SKN 0200 LEF 0135	Discussion
0207	Justine Madoo, Benjamin Pheasant MW 12:00pm - 12:50pm Th 12:30pm - 1:20pm	Seats (Total: 30) SKN 0200 SQH 1101	Discussion
0208	Justine Madoo, Benjamin Pheasant MW 12:00pm - 12:50pm Th 2:00pm - 2:50pm	Seats (Total: 30) SKN 0200 LEF 1201	Discussion

CCJS105 **Introduction to Criminology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

Criminal behavior and the methods of its study; causation; typologies of criminal acts and offenders; punishment, correction and incapacitation; prevention of crime.

0101	Katie Zafft MW 12:00pm - 12:50pm M 10:00am - 10:50am	Seats (Total: 30) HJP 0226 LEF 1220	Discussion
0102	Katie Zafft MW 12:00pm - 12:50pm M 1:00pm - 1:50pm	Seats (Total: 30) HJP 0226 LEF 1201	Discussion
0103	Katie Zafft MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 30) HJP 0226 LEF 0135	Discussion

0104	Katie Zafft MW 12:00pm - 12:50pm M 2:00pm - 2:50pm	Seats (Total: 30) HJP 0226 LEF 1220	 Discussion
0105	Katie Zafft MW 12:00pm - 12:50pm W 10:00am - 10:50am	Seats (Total: 30) HJP 0226 LEF 1220	 Discussion
0106	Katie Zafft MW 12:00pm - 12:50pm W 9:00am - 9:50am	Seats (Total: 30) HJP 0226 LEF 1220	 Discussion
0107	Katie Zafft MW 12:00pm - 12:50pm W 1:00pm - 1:50pm	Seats (Total: 30) HJP 0226 LEF 0135	 Discussion
0108	Katie Zafft MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 30) HJP 0226 WDS 1114	 Discussion
0201	Sally Simpson TuTh 12:30pm - 1:20pm M 2:00pm - 2:50pm	Seats (Total: 30) HJP 0226 SYM 0215	 Discussion
0202	Sally Simpson TuTh 12:30pm - 1:20pm Tu 9:30am - 10:20am	Seats (Total: 30) HJP 0226 LEF 1201	 Discussion
0203	Sally Simpson TuTh 12:30pm - 1:20pm Th 2:00pm - 2:50pm	Seats (Total: 30) HJP 0226 WDS 0104	 Discussion
0204	Sally Simpson TuTh 12:30pm - 1:20pm W 12:00pm - 12:50pm	Seats (Total: 30) HJP 0226 TYD 1108	 Discussion
0205	Sally Simpson TuTh 12:30pm - 1:20pm Th 9:30am - 10:20am	Seats (Total: 30) HJP 0226 JMZ 0122	 Discussion

0206	Sally Simpson TuTh 12:30pm - 1:20pm M 11:00am - 11:50am	Seats (Total: 30) HJP 0226 LEF 1220	Discussion
0207	Sally Simpson TuTh 12:30pm - 1:20pm W 2:00pm - 2:50pm	Seats (Total: 30) HJP 0226 SYM 0215	Discussion
0208	Sally Simpson TuTh 12:30pm - 1:20pm Tu 2:00pm - 2:50pm	Seats (Total: 30) HJP 0226 MTH 0106	Discussion

CCJS200 **Statistics for Criminology and Criminal Justice**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR

Prerequisite: CCJS100 or CCJS105. And 1 course with a minimum grade of C- from (STAT100, MATH107, MATH111, MATH120, MATH130, MATH135, MATH140); or must have completed MATH220 with a minimum grade of C-. Restriction: Must be in Criminology and Criminal Justice program; or permission of BSOS-Criminology & Criminal Justice department. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introduction to descriptive and inferential statistics, graphical techniques, and the computer analysis of criminology and criminal justice data. Basic procedures of hypothesis testing, correlation and regression analysis, and the analysis of continuous and binary dependent variables. Emphasis upon the examination of research problems and issues in criminology and criminal justice.

0101	Greg Midgette TuTh 9:30am - 10:45am Th 3:00pm - 3:50pm	Seats (Total: 30) MMH 1400 WDS 0104	Discussion
0102	Greg Midgette TuTh 9:30am - 10:45am Th 2:00pm - 2:50pm	Seats (Total: 30) MMH 1400 EDU 3233	Discussion
0103	Greg Midgette TuTh 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 30) MMH 1400 KEY 1117	Discussion

0104	Greg Midgette TuTh 9:30am - 10:45am Th 1:00pm - 1:50pm	Seats (Total: 30) MMH 1400 KEY 1117	Discussion
0105	Greg Midgette TuTh 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 30) MMH 1400 TYD 2110	Discussion
0106	Greg Midgette TuTh 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 30) MMH 1400 HBK 0109	Discussion

CCJS225 **Responses to Violence**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DSSP, SCIS

Conflict is unfortunately resolved through violence in a number of settings. It ranges from interpersonal to international in its scope. This course investigates the strengths and weakness of a number of resolutions to reducing violence over the course of history using both state centered and informal control.

0101	Katie Zafft MWF 11:00am - 11:50am	Seats (Total: 50) ESJ 1215

CCJS230 **Criminal Law in Action**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100.

Law as one of the methods of social control. Criminal law: its nature, sources and types; theories and historical developments. Behavioral and legal aspects of criminal acts. Classification and analysis of selected criminal offenses.

0101	Christine White MWF 9:00am - 9:50am	Seats (Total: 100) TYD 0117
0201	Russell Hamill Th 4:00pm - 6:30pm	Seats (Total: 100) MMH 1400

CCJS234 **Law of Criminal Investigation**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100 and CCJS230.

General principles and theories of criminal procedure. Due process. Arrest, search and seizure. Recent developments. Study and evaluation of evidence and proof.

0101	David Salem Th 6:00pm - 8:30pm	Seats (Total: 100) TYD 0117

CCJS300 **Criminological and Criminal Justice Research Methods**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSSP

Prerequisite: CCJS100 and CCJS105; and (PSYC200, CCJS200, ECON321, BMGT230, or SOCY201).

Introduction to the formulation of research questions covering crime and justice, research designs, data collection, and interpretation and reporting in criminological and justice-system settings.

0101	Laure Brooks MWF 9:00am - 9:50am	Seats (Total: 60) LEF 2166
0201	Laure Brooks MWF 11:00am - 11:50am	Seats (Total: 60) LEF 2166
0301	Alan Lehman TuTh 12:30pm - 1:45pm	Seats (Total: 60) SQH 1119
0401	Alan Lehman TuTh 11:00am - 12:15pm	Seats (Total: 60) TYD 2106
SG91	Thomas Alexander M 11:00am - 1:30pm *Restricted to CCJS students at Shady Grove.*	Seats (Total: 40) BLD3 3220

CCJS320 **Introduction to Criminalistics**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100 and CCJS230.

An introduction to modern methods used in the detection, investigation and solution of crimes. Practical analysis of evidence in a crime laboratory, including fingerprints and other impressions, firearms ID and ballistics, hairs and fibers, document examination, and use of polygraph.

Students must pay a $53.00 lab fee.

0101	Thomas Mauriello Class time/details on ELMs M 11:00am - 1:45pm	Seats (Total: 24) ONLINE MMH 2401	 Lab
0201	Thomas Mauriello Class time/details on ELMs M 2:30pm - 5:15pm	Seats (Total: 24) ONLINE MMH 2401	 Lab
0301	Thomas Mauriello Class time/details on ELMs M 6:00pm - 8:45pm	Seats (Total: 24) ONLINE MMH 2401	 Lab

CCJS325 **Slavery in the Twenty First Century: Combating Human Trafficking**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Credit only granted for: CCJS325 or CCJS498R. Formerly: CCJS498R.

The trafficking of human beings in its historical, legal, economic, political and social contexts. Scope of the global problem, different forms of human trafficking, and regional trends and practices. Roles of government, the international community and individual actors. Strategies to combat trafficking.

0101	Christine White M 2:00pm - 4:30pm	Seats (Total: 60) ASY 1213
0201	Christine White MWF 11:00am - 11:50am	Seats (Total: 60) TYD 2109
SG91	Wendy Stickle W 9:30am - 12:00pm *Limit to CCJS students at Shady Grove.*	Seats (Total: 30) BLD3 2226
SG92	Wendy Stickle W 9:30am - 12:00pm *Limit to Public Health Science students at Shady Grove.*	Seats (Total: 10) Location: TBA

CCJS332 **Major Transitions: From Undergraduate to Professional**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Criminology and Criminal Justice program; and sophomore standing or higher.

This course is designed to assist criminology and criminal justice students explore career opportunities. Topics will include: graduate school, law school, career opportunities in federal, state, local, and public agencies, resume writing, and internships.

0101	Nicole Jackson W 12:00pm - 12:50pm	Seats (Total: 50) TYD 1102

CCJS340 **Policing**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100.

Critical issues relating to policing. Topics include police discretion, role of police, use of force, misconduct, police research, administration, personnel, and etc.

0101	Laure Brooks MWF 10:00am - 10:50am	Seats (Total: 200) LEF 2205
0201	David Mitchell TuTh 2:00pm - 3:15pm	Seats (Total: 50) PHY 4221

CCJS342 **Corrections**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100. Restriction: Must be in a major within the BSOS-Criminology & Criminal Justice department. Credit only granted for: CCJS342 or CCJS452.

Examination of the American correctional system. Identification of historical and contemporary themes, issues, and trends. Evaluation of correctional policies, practices and research.

0201	Sarah Tahamont TuTh 12:30pm - 1:45pm	Seats (Total: 50) SQH 1117
0301	Lauren Porter MW 2:00pm - 3:15pm	Seats (Total: 60) SQH 1119

SG91	William Sollod M 3:30pm - 6:00pm	Seats (Total: 40) BLD3 4215

CCJS345 **Courts and Sentencing**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100. Restriction: Must be in a major within the BSOS-Criminology & Criminal Justice department.

Contemporary issues in the American court system such as prosecution, sentencing and punishment. Theoretical perspectives on courtroom decision-making integrated with empirical research. Courts and sentencing processes, including initial charging, pretrial detention and final sentencing outcomes. Innovations in courts and sentencing.

0101	James Lynch TuTh 9:30am - 10:45am	Seats (Total: 60) TWS 1100

CCJS346 **Domestic Violence**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100. Credit only granted for: CCJS346 or CCJS498Y. Formerly: CCJS498Y.

A thorough and critical examination of family violence. Topics include the historical background to family violence, methods of studying this serious issue, elder abuse, child abuse, the cultural factors involved in intimate partner violence, violence in same-sex relationships, and the criminal justice response to family violence. Although the course focuses on the American family, illustrations from other cultures are provided.

SG91	Nicole Romeiser Tu 11:00am - 1:30pm *Limit to CCJS students at Shady Grove.*	Seats (Total: 30) Location: TBA
SG92	Nicole Romeiser Tu 11:00am - 1:30pm *Registration is restricted to Biological Sciences- Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.*	Seats (Total: 10) Location: TBA

CCJS352 **Drugs and Crime**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100.

An analysis of the role of criminal justice in the control of drug use and abuse.

0101	Greg Midgette	Seats (Total: 75)
	TuTh 3:30pm - 4:45pm	LEF 2166

CCJS358B **Special Topics in Study Abroad III; Criminology in Scandanavia**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CCJS359 **Field Training in Criminology and Corrections**

(Perm req)

Credits: 1-6

Grading Method: Regular, Pass-Fail, Audit

Supervised field training in public or private social agencies. Group meetings, individual conferences and written program reports.

Prerequisites: CCJS 105 or CRIM 220; and CCJS 350 or CRIM 450; and permission of department. For majors only.

Contact department for information to register for this course.

CCJS360 **Victimology**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS105.

Overview of the history and theory of victimology. Analysis of victimization patterns with special emphasis on types of victims and crimes. The interaction between victims of crime and the criminal justice system with respect to the role of the victim and the services offered to the victim.

0101	Cortney Fisher	Seats (Total: 100)
	TuTh 5:00pm - 6:15pm	BPS 1243

CCJS370 **Race, Crime and Criminal Justice**

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DVUP

Prerequisite: CCJS100.

Role and treatment of racial/ethnic minorities in the criminal justice system. Course will provide students with historical and theoretical framework for understanding this dynamic.

0101	Christine White	Seats (Total: 50)
	W 2:00pm - 4:30pm	HBK 0115

CCJS386 **Experiential Learning**

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail

Restriction: Permission of BSOS-Criminology & Criminal Justice department; and junior standing or higher.

Contact department for information to register for this course.

CCJS398 **Law Enforcement Field Training**

(Perm req) Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Supervised, structured and focused field training in law enforcement agencies.

Prerequisite: junior standing. For majors only.

Contact department for information to register for this course.

CCJS399 **Independent Study in Criminology and Criminal Justice**

(Perm req) Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Integrated reading or research under direction and supervision of a faculty member.

Prerequisite: written consent of faculty under whose direction the study is to be performed, and at least twelve hours of CCJS credits.

Contact department for information to register for this course.

CCJS418D **Seminar in Criminology and Criminal Justice; Evolving Legal Issues**

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of interest in the field of Criminology and Criminal Justice will be covered.

Prereqs: CCJS 100 and CCJS 230

0101	David Salem	Seats (Total: 50)
	W 6:00pm - 8:30pm	TYD 0102

CCJS418P **Seminar in Criminology and Criminal Justice; Marijuana, Law and Society**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of interest in the field of Criminology and Criminal Justice will be covered.

Prerequisites: CCJS100 and CCJS105.

0101	Alan Lehman	Seats (Total: 50)
	TuTh 2:00pm - 3:15pm	SQH 1117

CCJS418Q **Seminar in Criminology and Criminal Justice; Crime and Place**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of interest in the field of Criminology and Criminal Justice will be covered.

Prerequisites: CCJS100, CCJS105, CCJS300.

0101	Maria Velez	Seats (Total: 50)
	MWF 11:00am - 11:50am	SQH 1119

CCJS450 **Advanced Juvenile Delinquency**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS105 and CCJS300. Credit only granted for: CCJS350 or CCJS450.

Examination of juvenile delinquency in the United States. Nature and extent of juvenile delinquency, historical approaches, sociological and criminological theories and research, social contexts including the institutions of families, schools, and peers, and social responses. Prevention, punishment, and treatment programs, both within and outside of the juvenile justice and criminal justice systems.

0301	Justine Madoo, Lisa Pierotte	Seats (Total: 50)
	TuTh 11:00am - 12:15pm	TYD 0117

SG91	Carlotta Woodward M 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 40) BLD3 2226 ONLINE

CCJS451 **Crime and Delinquency Prevention**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS105 and CCJS300.

Methods and programs in prevention of crime and delinquency.

0101	Katie Zafft MWF 1:00pm - 1:50pm	Seats (Total: 50) TYD 0117
0201	Katie Zafft Class time/details on ELMs	Seats (Total: 50) ONLINE

CCJS454 **Contemporary Criminological Theory**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS300 and CCJS105.

Examination of the main theoretical accounts that explain the underlying causes of criminal behaviors. Explore how individual choices, socialization experiences, biological factors and social structure affect criminal behaviors.

0101	Wade Jacobsen MWF 10:00am - 10:50am	Seats (Total: 50) ASY 2309

CCJS458M **Special Topics in Study Abroad IV; Social History of Mafia**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CCJS461 **Psychology of Criminal Behavior**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS105 and CCJS300.

Biological, environmental, and personality factors which influence criminal behaviors. Biophysiology and crime, stress and crime, maladjustment patterns, psychoses, personality disorders, aggression and violent crime, sex-motivated crime and sexual deviations, alcohol and drug abuse, and criminal behavior.

Contact department for information to register for this course.

CCJS498C **Selected Topics in Criminology and Criminal Justice; Police and Campus Interaction**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology an criminal justice. Offered in response to student request and faculty interest.

0101	Gary LaFree MW 3:30pm - 4:45pm	Seats (Total: 32) JMZ 0125

CCJS498G **Selected Topics in Criminology and Criminal Justice; Gangs**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology an criminal justice. Offered in response to student request and faculty interest.

Prerequisites: CCJS100 and CCJS105.

0101	Justine Madoo, Lisa Pierotte TuTh 9:30am - 10:45am	Seats (Total: 50) TYD 0117
SG91	Shawn Eastman Th 11:00am - 1:30pm *Limit to CCJS students at Shady Grove.*	Seats (Total: 40) Location: TBA

CCJS498J **Selected Topics in Criminology and Criminal Justice; Sexual Deviance and Crime**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology an criminal justice. Offered in response to student request and faculty interest.

SG91	Louis Morlier W 6:30pm - 9:00pm *Limit to CCJS students at Shady Grove.*	Seats (Total: 30) BLD3 2225

CCJS498L **Selected Topics in Criminology and Criminal Justice; Ethics in Criminal Justice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology an criminal justice. Offered in response to student request and faculty interest.

SG91	Charles Jordan Th 9:30am - 12:00pm	Seats (Total: 30) BLD3 3206

CCJS498M **Selected Topics in Criminology and Criminal Justice; Crime Mapping**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology an criminal justice. Offered in response to student request and faculty interest.

SG91	Marcus Boyd M 2:00pm - 4:30pm *Restricted to CCJS students at Shady Grove.*	Seats (Total: 30) BLD3 2215

CCJS498Q **Selected Topics in Criminology and Criminal Justice; Navigating Your Future: Transforming Your Degree into a Career**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology an criminal justice. Offered in response to student request and faculty interest.

SG91	Lindsey Seaby Tu 9:30am - 10:45am Class time/details on ELMs *This course is restricted to CCJS students at Shady Grove.*	Seats (Total: 40) BLD3 3206 ONLINE

CCJS498R **Selected Topics in Criminology and Criminal Justice; Politics and Crime**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology an criminal justice. Offered in response to student request and faculty interest.

SG91	Laszlo Korossy Tu 11:00am - 1:30pm *Limit to CCJS students at Shady Grove.*	Seats (Total: 30) BLD3 3206

CCJS498T **Selected Topics in Criminology and Criminal Justice; Victim Advocacy**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology an criminal justice. Offered in response to student request and faculty interest.

SG91	Heidi Bresee M 9:30am - 12:00pm *Limit to CCJS students at Shady Grove.*	Seats (Total: 25) BLD3 2226
SG92	Heidi Bresee M 9:30am - 12:00pm *Limit to Public Health Science students at Shady Grove.*	Seats (Total: 10) Location: TBA
SG93	Heidi Bresee M 9:30am - 12:00pm *Limit to Communication students at Shady Grove.*	Seats (Total: 5) Location: TBA

CCJS498U **Selected Topics in Criminology and Criminal Justice; Electronic Surveillance and Privacy**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology an criminal justice. Offered in response to student request and faculty interest.

SG91	John Conroy W 12:30pm - 3:00pm	Seats (Total: 30) BLD3 2226

CCJS498W **Selected Topics in Criminology and Criminal Justice; Cultural Issues in Criminal Defense**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology an criminal justice. Offered in response to student request and faculty interest.

SG91	Alan Drew W 9:30am - 12:00pm *Limit to CCJS students at Shady Grove.*	Seats (Total: 30) BLD3 3206

CCJS601 **Policing**

Credits: 3 Grading Method: Regular

An introduction to research, theory, and applications of the causes and consequences of police behavior. Community policing, problem-solving methods, police discretion, police misconduct, police crime prevention strategies, and restorative justice.

0101	Lawrence Sherman M 4:00pm - 6:45pm	Seats (Total: 20) LEF 2207

CCJS602 **Courts and Sentencing**

Credits: 3 Grading Method: Regular

Research and theory on prosecution, plea-bargaining, sentencing principles and guidelines, and sentencing policies in practice. Mandatory minimum sentencing, "three strikes" laws, race, gender and class disparities, general and specific deterrent effects of sentencing, restitution and restorative justice, diversion and sentencing to treatment.

0101	Brian Johnson W 4:00pm - 6:45pm	Seats (Total: 20) LEF 2165E

CCJS604 **Policy Analysis Project**

(Perm req)

Credits: 3 Grading Method: Regular

An application of statistical and conceptual tools to criminal justice data in the student's area of concentration, resulting in a paper reporting the conceptualization, analytic methods and results. The topic of the independent study will be chosen through individual consultation with the instructor.

Contact department for information to register for this course.

CCJS605 **Program Evaluation for Criminal Justice**

Credits: 3 Grading Method: Regular

Credit only granted for: CCJS605 or CCJS609. Formerly: CCJS609.

Designing, implementing and evaluating programs in criminal justice. Topics include diagnosing program needs, planning and tailoring evaluation programs, program monitoring, assessing program impact, program efficiency, and the social context of evaluation.

Contact department for information to register for this course.

CCJS610 **Research Methods in Criminal Justice and Criminology**

Credits: 3 Grading Method: Regular, Audit

Formerly: CRIM610.

Examination of special research problems and techniques.

0101	Min Xie	Seats (Total: 23)
	Tu 4:00pm - 6:45pm	LEF 2165E

CCJS611 **Statistical Tools for Criminal Justice**

Credits: 3 Grading Method: Regular

An introduction to essential statistical concepts for analyzing crime and evaluating criminal justice policies. Interpreting crime trends and correlations, risk and conditional probability analysis for repeat offenders and hot spots of crime, time series analysis, experimental statistics, effect sizes, statistical power and significance.

Contact department for information to register for this course.

CCJS621 **General Linear Models in Criminal Justice Research**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CCJS620. Credit only granted for: CCJS498F or CCJS621. Formerly: CCJS498F.

An in-depth exploration of applied linear regression analysis. Covers characteristics of estimates, such as unbiasedness and efficiency. Encourages fluency with the theoretical issues involved in the basic linear regression using simple algebra, familiarity with the general model using matrix algebra, and fluency with the computer application of multivariate regressions and the probit/logit models.

0101	Laura Dugan	Seats (Total: 25)
	M 4:00pm - 6:45pm	KEY 0121

CCJS651 **Seminar in Criminology**

Credits: 3

Grading Method: Regular, Audit

Formerly: CRIM651.

Analysis of significant recent issues in Criminology.

0101	Maria Velez	Seats (Total: 25)
	W 3:00pm - 5:45pm	LEF 2207

CCJS661 **Crime and the Life Course**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: CCJS699J or CCJS661. Formerly: CCJS699J.

Designed to provide an intensive examination of crime and the life course. Life course is examined as a theoretical orientation, a research methodology, and an empirical field of study with special reference to crime and deviance. Course includes development of criminal behavior and criminal careers; stability and change in criminal behavior across developmental stages; trajectories, transitions, and turning points through life; quantitative and qualitative approaches to studying crime and the life course; and social change and its link to individual lives.

0101	John Laub	Seats (Total: 20)
	Tu 12:00pm - 2:45pm	LEF 2207

CCJS678D **Advanced Topics in Criminology and Criminal Justice**

Credits: 3

Grading Method: Regular, Audit

An analysis of contemporary issues in criminology and criminal justice with special emphasis on research and theory developments.

Contact department for information to register for this course.

CCJS678E **Advanced Topics in Criminology and Criminal Justice**

Credits: 3

Grading Method: Regular, Audit

An analysis of contemporary issues in criminology and criminal justice with special emphasis on research and theory developments.

Contact department for information to register for this course.

CCJS699 **Special Criminological Problems**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Supervised study of a selected problem in the field of criminal justice.

Contact department for information to register for this course.

CCJS699J **Special Criminological Problems; Groups and Crime**

Credits: 3

Grading Method: Regular, Audit

Supervised study of a selected problem in the field of criminal justice.

0101	Jean McGloin	Seats (Total: 20)
	Tu 3:00pm - 5:45pm	LEF 2207

CCJS699L **Special Criminological Problems; Seminar on Causal Inference**

Credits: 3

Grading Method: Regular, Audit

Supervised study of a selected problem in the field of criminal justice.

0101	Sarah Tahamont	Seats (Total: 20)
	W 1:00pm - 3:45pm	LEF 2165E

CCJS699P **Special Criminological Problems; Testing Criminological Theory**

Credits: 3

Grading Method: Regular, Audit

Supervised study of a selected problem in the field of criminal justice.

0101	Sally Simpson	Seats (Total: 20)
	Th 4:00pm - 6:45pm	LEF 2165E

CCJS700 **Advanced Research Methods in Criminology and Criminal Justice**

Credits: 3

Grading Method: Regular

Prerequisite: CCJS610.

An in-depth inventory of the methods of criminological research. It considers the philosophy of science and research ethics; discusses sampling, measurement and methods of data collection, including survey, experimental, evaluation, and qualitative research.

0101	Lauren Porter	Seats (Total: 20)
	Th 4:00pm - 6:45pm	LEF 2207

CCJS799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

CCJS898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

CCJS899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Doctoral dissertation research in criminal justice and criminology.

Contact department for information to register for this course.

CHBE Chemical and Biomolecular Engineering Spring 2019

CHBE101 **Introduction to Chemical and Biomolecular Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM135; or students who have taken courses with comparable content may contact the department. Corequisite: MATH141. Restriction: Must be in Engineering: Chemical program; or permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE101 or ENCH215. Formerly: ENCH215.

Introduction to methods of chemical engineering calculations and analysis. Stoichiometric relations, material and energy balances, and behavior of gases, vapors, liquids and solids. Analytical and computer methods.

0101	Taylor Woehl	Seats (Total: 120)	
	MWF 12:00pm - 12:50pm	JMP 3201	
	F 1:00pm - 1:50pm	JMP 3201	Discussion

CHBE302 **Chemical and Biomolecular Engineering Thermodynamics II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHBE301. Corequisite: CHBE250. Restriction: Must be in a major within ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE302 or ENCH400. Formerly: ENCH400.

Contemporary trends in chemical engineering thermodynamics that bridge the gap between fundamentals and applications. Thermodynamic analysis of non-ideal and structured systems; such as complex fluids, strongly fluctuating and nanoscale systems, dissipative systems, biosystems, and systems under extreme conditions.

0101	Jeffery Klauda	Seats (Total: 85)	
	TuTh 9:30am - 10:45am	EGR 1202	
	F 10:00am - 10:50am	EGR 1202	Discussion

CHBE333 **Chemical Engineering Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Junior standing; and must be in a major within ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE333 or ENCH333. Formerly: ENCH333.

To develop oral communication skills through a series of class presentations of current chemical engineering topics.

0101	Nam Sun Wang	Seats (Total: 15)
	W 2:00pm - 2:50pm	CHE 2145
0102	Panagiotis Dimitrakopoulos	Seats (Total: 15)
	W 11:00am - 11:50am	CHE 2145
0104	Panagiotis Dimitrakopoulos	Seats (Total: 15)
	W 12:00pm - 12:50pm	CHE 2145
0106	Nam Sun Wang	Seats (Total: 15)
	Th 11:00am - 11:50am	EGR 3114

CHBE369 **Teaching Experiences in Chemical Engineering**

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Students will obtain pedagogical experience by assisting with the teaching of undergraduate courses in Chemical and Biomolecular Engineering.

2012	Jeffery Klauda Contact instructor or department for details.	Seats (Total: 5)
2014	Ganesh Sriram Contact instructor or department for details.	Seats (Total: 5)
2027	Amy Karlsson Contact instructor or department for details.	Seats (Total: 5)
2040	Taylor Woehl Contact instructor or department for details.	Seats (Total: 5)
2045	Deborah Goldberg Contact instructor or department for details.	Seats (Total: 5)

CHBE422 **Chemical and Biomolecular Engineering Transport Phenomena I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHBE101, CHBE250, MATH241, and MATH246. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE422 or ENCH422. Formerly: ENCH422.

Principals of fluid dynamics as applied to model development and proces design. Mass, momentum and energy conservation. Statics and surface tension. Equation of Continuity and Navier-Stokes Equation with application to laminar flow. Dimensional analysis. Macroscopic balances, Bernoulli Equation and friction factors with application to turbulent flow.

0101	Richard Calabrese TuTh 12:30pm - 1:45pm F 11:00am - 11:50am	Seats (Total: 30) ANS 0402 CHE 2136	 Discussion

CHBE424 **Chemical and Biomolecular Engineering Transport Phenomena II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHBE422. Corequisite: CHBE302. Restriction: Must be in Engineering: Chemical program; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE424 or ENCH424. Formerly: ENCH424.

Principles of mass and heat transfer as applied to model development an process design. Species continuity equation with application to diffusion, and convection in laminar flow. Macroscopic balances and mass transfer coefficients with application to turbulent flow. Microscopic equation of energy with application to heat conduction, and convection in laminar flow. Macroscopic energy balance and heat transfer coefficients with application to turbulent flow. Heat exchanger design.

0101	Deborah Goldberg	Seats (Total: 120)	
	TuTh 2:00pm - 3:15pm	CHE 2110	
	F 11:00am - 11:50am	CHE 2110	Discussion

CHBE426 **Chemical and Biomolecular Separation Processes**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Corequisite: CHBE302; and CHBE424. Restriction: Must be in Engineering: Chemical program; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE426 or ENCH426. Formerly: ENCH426.

Separation by stages operations. Rate dependent separation processes. Design application in distillation, gas absorption, liquid extraction, drying, adsorption and ion exhange.

0101	Amy Karlsson	Seats (Total: 50)	
	MWF 9:00am - 9:50am	CHE 2110	
	W 1:00pm - 1:50pm	CHE 2110	Discussion
0102	Amy Karlsson	Seats (Total: 50)	
	MWF 9:00am - 9:50am	CHE 2110	
	W 10:00am - 10:50am	CHE 2108	Discussion

CHBE446 **Process Engineering Economics and Design II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHBE442 and CHBE444. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE446 or ENCH446. Formerly: ENCH446.

Application of chemical engineering principles for the design of chemical processing equipment. Representative problems in the design of chemical plants will be the focus of this capstone design class. Comprehensive reports are required.

0102	Nam Sun Wang	Seats (Total: 36)	
	F 11:00am - 1:30pm	AJC 2119	

0103	Raymond Adomaitis M 2:00pm - 4:30pm	Seats (Total: 53) ATL 2428

CHBE457 **Design and Processing of Polymers for Biomedical Devices**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: MATH246; and CHEM231; and (CHBE301, ENMA461, or BIOE232). Recommended: Knowledge of basic fluid dynamics: CHBE422/BIOE331 or equivalent. Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: BIOE453, CHBE457, or ENMA425.

An overview of the design and processing of polymers used in medical applications. Following a discussion of the physical and mechanical properties of polymers, important classes of polymeric biomaterials will be surveyed, discussing material synthesis, processing techniques and equipment, as well as properties and performance in biomedical applications. Topics will include silicone elastomers, hydrogels, ultra-high molecular weight polyethylene, polyurethanes, polyureas, polyesters, degradable and resorbable polymeric biomaterial designs used in surgery and drug delivery, polymers for ophthalmologic and orthopedic applications, and biopolymers such as silks and collagen. Finally, the design of major industrial polymer processing equipment will be covered, and the fundamentals of extrusion, calendering, coating, fiber spinning, film blowing, and injection molding processes will be presented.

0101	Peter Kofinas MW 4:00pm - 5:15pm	Seats (Total: 30) AJC 2132

CHBE468 **Research**

(Perm req)

Credits: 1-3 Grading Method: Regular

Investigation of a research project under the direction of a faculty member. Comprehensive reports are required.

Contact department for information to register for this course.

CHBE472 **Control of Air Pollution Sources**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department.

Sources and effects of air pollutants, regulatory trends, atmospheric dispersion models, fundamentals of two-phase flow as applied to air pollution and air pollution control systems, design of systems for control of gases and particulate matter.

0101	Akua Asa-Awuku TuTh 12:30pm - 1:45pm	Seats (Total: 40) ESJ 2309

CHBE473 **Electrochemical Energy Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: ENCH468K or CHBE473. Formerly: ENCH468K.

The lecture will start from the basic electrochemical thermodynamics and kinetics, with emphasis on electrochemical techniques, fundamental principle and performance of batteries, and supercapacitors.

0101	Paul Albertus MW 11:00am - 12:15pm	Seats (Total: 20) JMP 2222
0201	Chunsheng Wang TuTh 5:00pm - 6:15pm	Seats (Total: 30) AJC 2121
ME01	Paul Albertus Class time/details on ELMs	Seats (Total: 5) ONLINE

CHBE474 **Biopharmaceutical Process Development and Manufacturing**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: BIOE120; and permission of instructor. Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE474, BIOE489T, or ENCH648D.

Covers the fundamental steps involved in process development and manufacturing of biopharmaceuticals. An overview of different classes of biopharmaceuticals as well as manufacturing requirements for clinical development and regulatory approval will be provided. In depth coverage of manufacturing steps including cell culture, purification and formulation as well as drug product manufacturing, analysis and stability will be covered. Scientific literature will be used to highlight current challenges and novel solutions in each step of the manufacturing process. Scale up considerations, GMP requirements and process economics will also be introduced.

0101	Deborah Goldberg MW 12:30pm - 1:45pm	Seats (Total: 20) AJC 2119

CHBE477 **Mesoscopic and Nanoscale Thermodynamics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: A prior course in classical thermodynamics. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE477 or ENCH468Q. Formerly: ENCH468Q.

Interdisciplinary course primarily for graduate and senior undergraduat students from engineering or science departments. New emerging technologies deal with bio-membrane and gene engineering, microreactor chemistry and microcapsule drug delivery, micro-fluids and porous media, nanoparticles and nanostructures, supercritical fluid extraction and artifical organs. Engineers often design processes where classical thermodynamics may be insufficient, e.g., strongly fluctuating and nanoscale systems, or dissipative systems under conditions far away from equilibrium.

0101	Mikhail Anisimov	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	EGR 1104

CHBE480 **Bionanotechnology: Physical Principles**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BIOE120; or students who have taken courses with comparable content may contact the department. Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department.

Physics at nano/micro scales. Biomolecular building blocks. Simplest biomolecular assembly: protein folding. Nanoscale intermolecular interactions important for biology. Protein-ligand binding. Protein higher-order assembly: filaments, networks. Protein filaments and motility. DNA, RNA and their assembly assisted by proteins. Viral capsid assembly. Lipid assembly into micelles, bilayers. Lipid-protein co-assembly in membranes. Lipid and polymer structures useful in medicine. Targeted delivery of drugs, genes by nano/micro structures. Cellular assembly in the eye, in insect wings. Cellular assembly at surfaces: gecko feet, duck feathers. Cellular assembly in the presence of crystals: biomineralization.

0101	Srinivasa Raghavan	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	CHE 2110

CHBE490 **Polymer Science**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as: ENMA495. Credit only granted for: CHBE490, ENCH490, or ENMA495. Formerly: ENCH490.

The elements of the polymer chemistry and industrial polymerization, polymer structures and physics, thermodynamics of polymer solutions, polymer processing methods, and engineering applications of polymers.

0101	Kyu Yong Choi TuTh 9:30am - 10:45am	Seats (Total: 24) CHE 2145	

CHEM Chemistry Spring 2019

CHEM131 **Chemistry I - Fundamentals of General Chemistry**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with CHEM132)

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: CHEM132. Recommended: For Science majors. Credit only granted for: CHEM103, CHEM131, CHEM135, CHEM153 or CHEM146. Formerly: CHEM103.

An overview of the Periodic Table, inorganic substances, ionic and covalent bonding, bulk properties of materials, chemical equilibrium, and quantitative chemistry. CHEM131 is the first course in a four-semester sequence for students majoring in the sciences, other than Chemistry and Biochemistry majors.

1115	Alice Mignerey TuTh 8:00am - 9:15am M 12:00pm - 12:50pm	Seats (Total: 33) CHM 1407 CHM 0119	Discussion
1116	Alice Mignerey TuTh 8:00am - 9:15am M 1:00pm - 1:50pm	Seats (Total: 33) CHM 1407 CHM 0119	Discussion
1117	Alice Mignerey TuTh 8:00am - 9:15am M 2:00pm - 2:50pm	Seats (Total: 33) CHM 1407 CHM 0119	Discussion
1135	Alice Mignerey TuTh 8:00am - 9:15am W 12:00pm - 12:50pm	Seats (Total: 33) CHM 1407 CHM 0119	Discussion
1136	Alice Mignerey TuTh 8:00am - 9:15am W 1:00pm - 1:50pm	Seats (Total: 33) CHM 1407 CHM 0119	Discussion
1138	Alice Mignerey TuTh 8:00am - 9:15am W 2:00pm - 2:50pm	Seats (Total: 33) CHM 1407 CHM 0119	Discussion

1214	Monique Koppel TuTh 11:00am - 12:15pm M 11:00am - 11:50am	Seats (Total: 33) CHM 1407 CHM 0128	Discussion
1215	Monique Koppel TuTh 11:00am - 12:15pm M 12:00pm - 12:50pm	Seats (Total: 33) CHM 1407 CHM 0128	Discussion
1218	Monique Koppel TuTh 11:00am - 12:15pm M 3:00pm - 3:50pm	Seats (Total: 33) CHM 1407 CHM 0128	Discussion
1234	Monique Koppel TuTh 11:00am - 12:15pm W 11:00am - 11:50am	Seats (Total: 33) CHM 1407 CHM 0128	Discussion
1235	Monique Koppel TuTh 11:00am - 12:15pm W 12:00pm - 12:50pm	Seats (Total: 33) CHM 1407 CHM 0128	Discussion
1238	Monique Koppel TuTh 11:00am - 12:15pm W 3:00pm - 3:50pm	Seats (Total: 33) CHM 1407 CHM 0128	Discussion
1314	Elizabeth Griffith TuTh 12:30pm - 1:45pm M 11:00am - 11:50am	Seats (Total: 33) CHM 1407 CHM 0127	Discussion
1315	Elizabeth Griffith TuTh 12:30pm - 1:45pm M 12:00pm - 12:50pm	Seats (Total: 33) CHM 1407 CHM 0127	Discussion
1317	Elizabeth Griffith TuTh 12:30pm - 1:45pm M 2:00pm - 2:50pm	Seats (Total: 33) CHM 1407 CHM 0127	Discussion
1334	Elizabeth Griffith TuTh 12:30pm - 1:45pm W 11:00am - 11:50am	Seats (Total: 33) CHM 1407 CHM 0127	Discussion

1335	Elizabeth Griffith TuTh 12:30pm - 1:45pm W 12:00pm - 12:50pm	Seats (Total: 33) CHM 1407 CHM 0127	 Discussion
1337	Elizabeth Griffith TuTh 12:30pm - 1:45pm W 2:00pm - 2:50pm	Seats (Total: 33) CHM 1407 CHM 0127	 Discussion
SES1	Natalia White M 6:30pm - 9:30pm W 6:30pm - 7:20pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 34) CHM 0119 CHM 0127	 Discussion

CHEM132 **General Chemistry I Laboratory**

Credits: 1 Grading Method: Regular, Pass-Fail

Corequisite: CHEM131. Credit only granted for: CHEM103, CHEM132, CHEM136, CHEM143, CHEM147 or CHEM177. Formerly: CHEM103.

Introduction to the quantification of chemical substances, including the concept of the mole and chemical stoichiometry. Additional work involves the synthesis of ionic substances and their qualitative characterization. Must be taken concurrently with CHEM131.

Laboratory sessions will begin after the first lecture. Students must pay a $40.00 lab materials fee.

1111	Christiana Guest M 9:00am - 11:50am	Seats (Total: 24) ESJ 1312	 Lab
1121	Christiana Guest M 12:00pm - 2:50pm	Seats (Total: 24) ESJ 1312	 Lab
1122	Christiana Guest M 12:00pm - 2:50pm	Seats (Total: 24) ESJ 1316	 Lab
1131	Christiana Guest M 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1312	 Lab
1132	Christiana Guest M 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1316	 Lab

1221	Christiana Guest Tu 12:30pm - 3:20pm	Seats (Total: 24) ESJ 1312	Lab
1222	Christiana Guest Tu 12:30pm - 3:20pm	Seats (Total: 24) ESJ 1316	Lab
1231	Christiana Guest Tu 3:30pm - 6:20pm	Seats (Total: 24) ESJ 1312	Lab
1232	Christiana Guest Tu 3:30pm - 6:20pm	Seats (Total: 24) ESJ 1316	Lab
1321	Christiana Guest W 12:00pm - 2:50pm	Seats (Total: 24) ESJ 1312	Lab
1331	Christiana Guest W 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1312	Lab
1332	Christiana Guest W 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1316	Lab
1411	Christiana Guest Th 9:30am - 12:20pm	Seats (Total: 24) ESJ 1312	Lab
1412	Christiana Guest Th 9:30am - 12:20pm	Seats (Total: 24) ESJ 1316	Lab
1421	Christiana Guest Th 12:30pm - 3:20pm	Seats (Total: 24) ESJ 1312	Lab
1431	Christiana Guest Th 3:30pm - 6:20pm	Seats (Total: 24) ESJ 1312	Lab
1432	Christiana Guest Th 3:30pm - 6:20pm	Seats (Total: 24) ESJ 1316	Lab
1511	Christiana Guest F 9:00am - 11:50am	Seats (Total: 24) ESJ 1312	Lab
1521	Christiana Guest F 12:00pm - 2:50pm	Seats (Total: 24) ESJ 1312	Lab

1522	Christiana Guest F 12:00pm - 2:50pm	Seats (Total: 24) ESJ 1316	 Lab
1531	Christiana Guest F 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1312	 Lab
1532	Christiana Guest F 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1316	 Lab
SES1	Christiana Guest W 7:30pm - 10:20pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 24) ESJ 1330	 Lab

CHEM134 **Chemical Principles for Engineering**

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in CHEM131; or minimum grade of C- in CHEM146. Credit only granted for: CHEM 134 or CHEM 135.

Basic chemistry for engineering students. Introduction to organic structures and polymers, gas laws, liquids, solids, phase changes, chemical kinetics and electrochemistry.

0101	Earle Stone Tu 3:30pm - 4:20pm	Seats (Total: 155) ESJ 2204	

CHEM135 **General Chemistry for Engineers**

Credits: 3 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Credit only granted for: CHEM103, CHEM113, CHEM131, CHEM135, or CHEM146.

The nature and composition of matter, solutions, chemical reactions, equilibria, and electrochemistry, with applications to various fields of engineering.

3125	Cheng Lee MWF 3:00pm - 3:50pm Tu 12:30pm - 1:20pm	Seats (Total: 30) CHM 1407 CHM 0119	 Discussion
3127	Cheng Lee MWF 3:00pm - 3:50pm Tu 2:00pm - 2:50pm	Seats (Total: 30) CHM 1407 CHM 0119	 Discussion

3128	Cheng Lee MWF 3:00pm - 3:50pm Tu 3:30pm - 4:20pm	Seats (Total: 30) CHM 1407 CHM 0119	Discussion
3145	Cheng Lee MWF 3:00pm - 3:50pm Th 11:00am - 11:50am	Seats (Total: 30) CHM 1407 CHM 0115	Discussion
3147	Cheng Lee MWF 3:00pm - 3:50pm Th 2:00pm - 2:50pm	Seats (Total: 30) CHM 1407 CHM 0115	Discussion
3148	Cheng Lee MWF 3:00pm - 3:50pm Th 3:30pm - 4:20pm	Seats (Total: 30) CHM 1407 CHM 0115	Discussion

CHEM136 **General Chemistry Laboratory for Engineers**

Credits: 1 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in CHEM135. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering.

A laboratory course for engineering majors intending to take CHEM231 and CHEM232.

Students must pay a $40.00 lab materials fee.

1135	Natalia White M 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1330	Lab
1225	Natalia White Tu 12:30pm - 3:20pm	Seats (Total: 24) ESJ 1330	Lab

CHEM231 **Organic Chemistry I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131, CHEM135, or CHEM146; and (CHEM132, CHEM136, CHEM147, or CHEM177); and a grade of C- or better in the prerequisites is required of College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM232. Credit only granted for: CHEM104, CHEM231, CHEM233 or CHEM237. Formerly: CHEM233.

The chemistry of carbon: aliphatic compounds, aromatic compounds, stereochemistry, arenes, halides, alcohols, esters and spectroscopy.

5116	Bonnie Dixon TuTh 2:00pm - 3:15pm M 1:00pm - 1:50pm	Seats (Total: 32) CHM 1407 CHM 0115	Discussion
5117	Bonnie Dixon TuTh 2:00pm - 3:15pm M 2:00pm - 2:50pm	Seats (Total: 32) CHM 1407 CHM 0115	Discussion
5118	Bonnie Dixon TuTh 2:00pm - 3:15pm M 3:00pm - 3:50pm	Seats (Total: 32) CHM 1407 CHM 0115	Discussion
5136	Bonnie Dixon TuTh 2:00pm - 3:15pm W 1:00pm - 1:50pm	Seats (Total: 32) CHM 1407 CHM 0115	Discussion
5137	Bonnie Dixon TuTh 2:00pm - 3:15pm W 2:00pm - 2:50pm	Seats (Total: 32) CHM 1407 CHM 0115	Discussion
5138	Bonnie Dixon TuTh 2:00pm - 3:15pm W 3:00pm - 3:50pm	Seats (Total: 32) CHM 1407 CHM 0115	Discussion
5221	Jeffery Davis MWF 8:00am - 8:50am Tu 8:00am - 8:50am	Seats (Total: 32) CHM 1407 CHM 0122	Discussion
5222	Jeffery Davis MWF 8:00am - 8:50am Tu 9:30am - 10:20am	Seats (Total: 32) CHM 1407 CHM 0122	Discussion
5225	Jeffery Davis MWF 8:00am - 8:50am Tu 11:00am - 11:50am	Seats (Total: 32) CHM 1407 CHM 0122	Discussion
5241	Jeffery Davis MWF 8:00am - 8:50am Th 8:00am - 8:50am	Seats (Total: 32) CHM 1407 CHM 0122	Discussion

5242	Jeffery Davis MWF 8:00am - 8:50am Th 9:30am - 10:20am	Seats (Total: 32) CHM 1407 CHM 0122	Discussion
5245	Jeffery Davis MWF 8:00am - 8:50am Th 12:30pm - 1:20pm	Seats (Total: 32) CHM 1407 CHM 0127	Discussion
5322	Lenea Stocker MWF 10:00am - 10:50am Tu 12:30pm - 1:20pm	Seats (Total: 32) CHM 1407 CHM 0122	Discussion
5325	Lenea Stocker MWF 10:00am - 10:50am Tu 2:00pm - 2:50pm	Seats (Total: 32) CHM 1407 CHM 0122	Discussion
5328	Lenea Stocker MWF 10:00am - 10:50am Tu 3:30pm - 4:20pm	Seats (Total: 32) CHM 1407 CHM 0122	Discussion
5342	Lenea Stocker MWF 10:00am - 10:50am Th 12:30pm - 1:20pm	Seats (Total: 32) CHM 1407 CHM 0122	Discussion
5345	Lenea Stocker MWF 10:00am - 10:50am Th 2:00pm - 2:50pm	Seats (Total: 32) CHM 1407 CHM 0122	Discussion
5348	Lenea Stocker MWF 10:00am - 10:50am Th 3:30pm - 4:20pm	Seats (Total: 32) CHM 1407 CHM 0122	Discussion
5421	Lenea Stocker MWF 1:00pm - 1:50pm Tu 12:30pm - 1:20pm	Seats (Total: 32) CHM 1407 CHM 2201	Discussion
5427	Lenea Stocker MWF 1:00pm - 1:50pm Tu 2:00pm - 2:50pm	Seats (Total: 32) CHM 1407 CHM 2201	Discussion

5428	Lenea Stocker MWF 1:00pm - 1:50pm Tu 3:30pm - 4:20pm	Seats (Total: 32) CHM 1407 CHM 2201	 Discussion
5441	Lenea Stocker MWF 1:00pm - 1:50pm Th 12:30pm - 1:20pm	Seats (Total: 32) CHM 1407 CHM 2201	 Discussion
5447	Lenea Stocker MWF 1:00pm - 1:50pm Th 2:00pm - 2:50pm	Seats (Total: 32) CHM 1407 CHM 2201	 Discussion
5448	Lenea Stocker MWF 1:00pm - 1:50pm Th 3:30pm - 4:20pm	Seats (Total: 32) CHM 1407 CHM 2201	 Discussion
5511	Lee Friedman TuTh 8:00am - 9:15am M 8:00am - 8:50am	Seats (Total: 32) PHY 1412 CHM 0128	 Discussion
5512	Lee Friedman TuTh 8:00am - 9:15am M 9:00am - 9:50am	Seats (Total: 32) PHY 1412 CHM 0128	 Discussion
5513	Lee Friedman TuTh 8:00am - 9:15am M 10:00am - 10:50am	Seats (Total: 32) PHY 1412 CHM 0128	 Discussion
5531	Lee Friedman TuTh 8:00am - 9:15am W 8:00am - 8:50am	Seats (Total: 32) PHY 1412 CHM 0128	 Discussion
5532	Lee Friedman TuTh 8:00am - 9:15am W 9:00am - 9:50am	Seats (Total: 32) PHY 1412 CHM 0128	 Discussion
5533	Lee Friedman TuTh 8:00am - 9:15am W 10:00am - 10:50am	Seats (Total: 32) PHY 1412 CHM 0128	 Discussion

SES1	Monique Koppel M 6:30pm - 9:30pm W 6:30pm - 7:20pm	Seats (Total: 25) CHM 0122 CHM 0115	 Discussion
	Restricted to students in the SIE Program. Click here for more information.		

CHEM232 **Organic Chemistry Laboratory I**

Credits: 1 Grading Method: Regular

Prerequisite: CHEM131 and CHEM132; or (CHEM135 and CHEM136); or (CHEM146 and CHEM147). And a grade of C- or better in the prerequisites is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM231. Credit only granted for: CHEM104, CHEM231, CHEM233 or CHEM237. Formerly: CHEM233.

Provides experience in developing some basic laboratory techniques, recrystallization, distillation, extraction, chromatography.

Students must pay a $40.00 lab materials fee.

5121	Monique Koppel M 12:00pm - 2:50pm	Seats (Total: 18) CHM 1330	 Lab
5122	Monique Koppel M 12:00pm - 2:50pm	Seats (Total: 18) CHM 1342	 Lab
5123	Monique Koppel M 12:00pm - 2:50pm	Seats (Total: 18) CHM 1346	 Lab
5124	Monique Koppel M 12:00pm - 2:50pm	Seats (Total: 18) CHM 1356	 Lab
5125	Monique Koppel M 12:00pm - 2:50pm	Seats (Total: 18) CHM 1360	 Lab
5131	Monique Koppel M 3:00pm - 5:50pm	Seats (Total: 18) CHM 1330	 Lab
5132	Monique Koppel M 3:00pm - 5:50pm	Seats (Total: 18) CHM 1342	 Lab
5134	Monique Koppel M 3:00pm - 5:50pm	Seats (Total: 18) CHM 1356	 Lab

5135	Monique Koppel M 3:00pm - 5:50pm	Seats (Total: 18) CHM 1360	Lab
5141	Monique Koppel M 6:00pm - 8:50pm	Seats (Total: 18) CHM 1330	Lab
5142	Monique Koppel M 6:00pm - 8:50pm	Seats (Total: 18) CHM 1342	Lab
5143	Monique Koppel M 6:00pm - 8:50pm	Seats (Total: 18) CHM 1346	Lab
5144	Monique Koppel M 6:00pm - 8:50pm	Seats (Total: 18) CHM 1356	Lab
5145	Monique Koppel M 6:00pm - 8:50pm	Seats (Total: 18) CHM 1360	Lab
5221	Monique Koppel Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1330	Lab
5222	Monique Koppel Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1342	Lab
5223	Monique Koppel Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1346	Lab
5224	Monique Koppel Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1356	Lab
5225	Monique Koppel Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1360	Lab
5232	Monique Koppel Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1342	Lab
5233	Monique Koppel Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1346	Lab
5234	Monique Koppel Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1356	Lab

5235	Monique Koppel Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1360	Lab
5241	Monique Koppel Tu 6:30pm - 9:20pm	Seats (Total: 18) CHM 1330	Lab
5242	Monique Koppel Tu 6:30pm - 9:20pm	Seats (Total: 18) CHM 1342	Lab
5243	Monique Koppel Tu 6:30pm - 9:20pm	Seats (Total: 18) CHM 1346	Lab
5244	Monique Koppel Tu 6:30pm - 9:20pm	Seats (Total: 18) CHM 1356	Lab
5321	Monique Koppel W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1330	Lab
5322	Monique Koppel W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1342	Lab
5323	Monique Koppel W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1346	Lab
5324	Monique Koppel W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1356	Lab
5331	Monique Koppel W 3:00pm - 5:50pm	Seats (Total: 18) CHM 1330	Lab
5332	Monique Koppel W 3:00pm - 5:50pm	Seats (Total: 18) CHM 1342	Lab
5333	Monique Koppel W 3:00pm - 5:50pm	Seats (Total: 18) CHM 1346	Lab
5334	Monique Koppel W 3:00pm - 5:50pm	Seats (Total: 14) CHM 1356	Lab
5343	Monique Koppel W 6:00pm - 8:50pm	Seats (Total: 18) CHM 1346	Lab

5344	Monique Koppel W 6:00pm - 8:50pm	Seats (Total: 18) CHM 1356	Lab
5421	Monique Koppel Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1330	Lab
5422	Monique Koppel Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1342	Lab
5423	Monique Koppel Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1346	Lab
5424	Monique Koppel Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1356	Lab
5431	Monique Koppel Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1330	Lab
5432	Monique Koppel Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1342	Lab
5433	Monique Koppel Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1346	Lab
SES1	Monique Koppel W 7:30pm - 10:20pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 18) CHM 1342	Lab
SES2	Monique Koppel W 7:30pm - 10:20pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 18) CHM 1330	Lab

CHEM232S **Organic Chemistry Laboratory I**

Credits: 1 Grading Method: Regular

Prerequisite: CHEM131 and CHEM132; or (CHEM135 and CHEM136); or (CHEM146 and CHEM147). And a grade of C- or better in the prerequisites is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM231. Credit only granted for: CHEM104, CHEM231, CHEM233 or CHEM237. Formerly: CHEM233.

Provides experience in developing some basic laboratory techniques, recrystallization, distillation, extraction, chromatography.

Restricted to College Park Scholars - Life Sciences. Students must pay a $40.00 lab materials fee.

5133	Monique Koppel M 3:00pm - 5:50pm	Seats (Total: 18) CHM 1346	 Lab
5231	Monique Koppel Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1330	 Lab
5434	Monique Koppel Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1356	 Lab

CHEM237 **Principles of Organic Chemistry I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131, CHEM135, or CHEM146; and (CHEM132, CHEM136, or CHEM147); and a grade of C- or better in the prerequisites is required of College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Or permission of CMNS-Chemistry & Biochemistry department. Restriction: Must be in one of the following programs (Chemistry; Biochemistry) ; or must be in a major in ENGR-A. James Clark School of Engineering. Credit only granted for: CHEM233, (CHEM231 and CHEM232), or CHEM237.

The chemistry of carbons: aliphatic compounds, aromatic compounds, stereochemistry, arenes, halides, alcohols, esters, and spectroscopy.

Students must pay a $40.00 lab materials fee.

5325	Osvaldo Gutierrez MWF 10:00am - 10:50am W 12:00pm - 2:50pm Tu 12:30pm - 1:20pm	Seats (Total: 18) CHM 1402 CHM 1360 CHM 1228	 Lab Discussion
5335	Osvaldo Gutierrez MWF 10:00am - 10:50am W 3:00pm - 5:50pm Tu 12:30pm - 1:20pm	Seats (Total: 18) CHM 1402 CHM 1360 CHM 1228	 Lab Discussion
5345	Osvaldo Gutierrez MWF 10:00am - 10:50am Th 12:30pm - 3:20pm Tu 2:00pm - 2:50pm	Seats (Total: 18) CHM 1402 CHM 1360 CHM 1228	 Lab Discussion

5355	Osvaldo Gutierrez MWF 10:00am - 10:50am Th 3:30pm - 6:20pm Tu 2:00pm - 2:50pm	Seats (Total: 18) CHM 1402 CHM 1360 CHM 1228	 Lab Discussion

CHEM241 **Organic Chemistry II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM231 and CHEM232; or CHEM237. And a grade of C- or better in the prerequisites is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Credit only granted for: CHEM241, CHEM243 or CHEM247. Formerly: CHEM243.

A continuation of CHEM231 with emphasis on molecular structure; substitution reactions; carbonium ions; aromaticity; synthetic processes; macromolecules.

6121	Daniel Falvey MWF 9:00am - 9:50am Tu 8:00am - 8:50am	Seats (Total: 30) CHM 1407 CHM 0119	 Discussion
6125	Daniel Falvey MWF 9:00am - 9:50am Tu 9:30am - 10:20am	Seats (Total: 30) CHM 1407 CHM 0119	 Discussion
6127	Daniel Falvey MWF 9:00am - 9:50am Tu 11:00am - 11:50am	Seats (Total: 30) CHM 1407 CHM 0119	 Discussion
6141	Daniel Falvey MWF 9:00am - 9:50am Th 8:00am - 8:50am	Seats (Total: 30) CHM 1407 CHM 0119	 Discussion
6145	Daniel Falvey MWF 9:00am - 9:50am Th 9:30am - 10:20am	Seats (Total: 30) CHM 1407 CHM 0119	 Discussion
6147	Daniel Falvey MWF 9:00am - 9:50am Th 12:30pm - 1:20pm	Seats (Total: 30) CHM 1407 CHM 0119	 Discussion

6222	Lyle Isaacs TuTh 3:30pm - 4:45pm M 1:00pm - 1:50pm	Seats (Total: 30) CHM 1407 CHM 0122	 Discussion
6225	Lyle Isaacs TuTh 3:30pm - 4:45pm M 2:00pm - 2:50pm	Seats (Total: 30) CHM 1407 CHM 0122	 Discussion
6227	Lyle Isaacs TuTh 3:30pm - 4:45pm M 3:00pm - 3:50pm	Seats (Total: 30) CHM 1407 CHM 0122	 Discussion
6242	Lyle Isaacs TuTh 3:30pm - 4:45pm W 1:00pm - 1:50pm	Seats (Total: 30) CHM 1407 CHM 0122	 Discussion
6245	Lyle Isaacs TuTh 3:30pm - 4:45pm W 2:00pm - 2:50pm	Seats (Total: 30) CHM 1407 CHM 0122	 Discussion
6247	Lyle Isaacs TuTh 3:30pm - 4:45pm W 3:00pm - 3:50pm	Seats (Total: 30) CHM 1407 CHM 0122	 Discussion
6321	Michael Montague-Smith MWF 2:00pm - 2:50pm Tu 12:30pm - 1:20pm	Seats (Total: 30) CHM 1407 CHM 1109	 Discussion
6322	Michael Montague-Smith MWF 2:00pm - 2:50pm Tu 2:00pm - 2:50pm	Seats (Total: 30) CHM 1407 CHM 1109	 Discussion
6325	Michael Montague-Smith MWF 2:00pm - 2:50pm Tu 3:30pm - 4:20pm	Seats (Total: 30) CHM 1407 CHM 1109	 Discussion
6341	Michael Montague-Smith MWF 2:00pm - 2:50pm Th 12:30pm - 1:20pm	Seats (Total: 30) CHM 1407 CHM 1109	 Discussion

6342	Michael Montague-Smith MWF 2:00pm - 2:50pm Th 2:00pm - 2:50pm	Seats (Total: 30) CHM 1407 CHM 1109	 Discussion
6345	Michael Montague-Smith MWF 2:00pm - 2:50pm Th 3:30pm - 4:20pm	Seats (Total: 30) CHM 1407 CHM 1109	 Discussion
SES1	Howard Fribush M 6:30pm - 9:30pm W 6:30pm - 7:20pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 22) PLS 1140 CHM 0119	 Discussion
SES2	Howard Fribush M 6:30pm - 9:30pm W 6:30pm - 7:20pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 19) PLS 1140 CHM 0122	 Discussion

CHEM242 **Organic Chemistry Laboratory II**

Credits: 1 Grading Method: Regular

Prerequisite: CHEM231 and CHEM232; or CHEM237. And a grade of C- or better in the prerequisites is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM241. Credit only granted for: CHEM243 or CHEM247. Formerly: CHEM243.

Synthetic organic chemistry through functional group manipulation, introduction to instrumentation essential to analysis and structure elucidation.

Students must pay a $40.00 lab materials fee.

6122	Lee Friedman M 12:00pm - 2:50pm	Seats (Total: 18) CHM 1308	 Lab
6123	Lee Friedman M 12:00pm - 2:50pm	Seats (Total: 18) CHM 1326	 Lab
6131	Lee Friedman M 3:00pm - 5:50pm	Seats (Total: 18) CHM 1302	 Lab
6133	Lee Friedman M 3:00pm - 5:50pm	Seats (Total: 18) CHM 1326	 Lab

6141	Lee Friedman M 6:00pm - 8:50pm	Seats (Total: 18) CHM 1302	Lab
6142	Lee Friedman M 6:00pm - 8:50pm	Seats (Total: 18) CHM 1308	Lab
6221	Lee Friedman Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1302	Lab
6222	Lee Friedman Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1308	Lab
6223	Lee Friedman Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1326	Lab
6231	Lee Friedman Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1302	Lab
6233	Lee Friedman Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1326	Lab
6241	Lee Friedman Tu 6:30pm - 9:20pm	Seats (Total: 18) CHM 1302	Lab
6242	Lee Friedman Tu 6:30pm - 9:20pm	Seats (Total: 18) CHM 1308	Lab
6321	Lee Friedman W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1302	Lab
6322	Lee Friedman W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1308	Lab
6323	Lee Friedman W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1326	Lab
6331	Lee Friedman W 3:00pm - 5:50pm	Seats (Total: 18) CHM 1302	Lab
6332	Lee Friedman W 3:00pm - 5:50pm	Seats (Total: 14) CHM 1308	Lab

6333	Lee Friedman W 3:00pm - 5:50pm	Seats (Total: 18) CHM 1326	Lab
6341	Lee Friedman W 6:00pm - 8:50pm	Seats (Total: 18) CHM 1302	Lab
6422	Lee Friedman Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1308	Lab
6423	Lee Friedman Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1302	Lab
6431	Lee Friedman Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1302	Lab
6432	Lee Friedman Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1308	Lab
6433	Lee Friedman Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1326	Lab
SES1	Lee Friedman W 7:30pm - 10:20pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 18) CHM 1308	Lab

CHEM271 **General Chemistry and Energetics**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM241 and CHEM242; or CHEM247. And a grade of C- or better in the prerequisites for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM272. Credit only granted for: CHEM113, CHEM153, CHEM271 or CHEM276. Formerly: CHEM113.

An introduction to the physical aspects of chemistry; chemical kinetics thermodynamics and electrochemistry in the context of current chemistry research.

2122	Pedro Bueno MW 11:00am - 11:50am Tu 8:00am - 8:50am	Seats (Total: 39) CHM 1407 CHM 0115	Discussion

2124	Pedro Bueno MW 11:00am - 11:50am Tu 9:30am - 10:20am	Seats (Total: 39) CHM 1407 CHM 0115	Discussion
2125	Pedro Bueno MW 11:00am - 11:50am Tu 11:00am - 11:50am	Seats (Total: 39) CHM 1407 CHM 0115	Discussion
2142	Pedro Bueno MW 11:00am - 11:50am Th 8:00am - 8:50am	Seats (Total: 39) CHM 1407 CHM 0115	Discussion
2144	Pedro Bueno MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 39) CHM 1407 CHM 0115	Discussion
2145	Pedro Bueno MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 39) CHM 1407 CHM 0115	Discussion
2224	Pedro Bueno MW 12:00pm - 12:50pm Tu 12:30pm - 1:20pm	Seats (Total: 39) CHM 1407 CHM 0115	Discussion
2227	Pedro Bueno MW 12:00pm - 12:50pm Tu 2:00pm - 2:50pm	Seats (Total: 39) CHM 1407 CHM 0115	Discussion
2228	Pedro Bueno MW 12:00pm - 12:50pm Tu 3:30pm - 4:20pm	Seats (Total: 39) CHM 1407 CHM 0115	Discussion
2244	Pedro Bueno MW 12:00pm - 12:50pm Th 12:30pm - 1:20pm	Seats (Total: 39) CHM 1407 CHM 1228	Discussion
2247	Pedro Bueno MW 12:00pm - 12:50pm Th 2:00pm - 2:50pm	Seats (Total: 39) CHM 1407 CHM 1228	Discussion

2248	Pedro Bueno MW 12:00pm - 12:50pm Th 3:30pm - 4:20pm	Seats (Total: 39) CHM 1407 CHM 1228	 Discussion
SES1	Daniel Gowetski M 6:00pm - 7:50pm W 6:30pm - 7:20pm	Seats (Total: 24) PLS 1121 PLS 1121	 Discussion
	Restricted to students in the SIE Program. Click here for more information.		

CHEM272 **General Bioanalytical Chemistry Laboratory**

Credits: 2 Grading Method: Regular, Pass-Fail

Prerequisite: CHEM241 and CHEM242; or CHEM247. And a grade of C- or better in the prerequisites is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM271. Credit only granted for: CHEM227, CHEM272 or CHEM277.

An introduction to analytical chemistry with an emphasis on bio-analytical instrumentation and techniques.

Students must pay a $40.00 lab materials fee.

8111	Amanda Schech F 11:00am - 11:50am M 9:00am - 11:50am	Seats (Total: 12) CHM 1407 ESJ 2312	 Lab
8122	Amanda Schech F 11:00am - 11:50am M 12:00pm - 2:50pm	Seats (Total: 24) CHM 1407 ESJ 2316	 Lab
8132	Amanda Schech F 11:00am - 11:50am M 3:00pm - 5:50pm	Seats (Total: 24) CHM 1407 ESJ 2316	 Lab
8211	Amanda Schech F 11:00am - 11:50am Tu 9:30am - 12:20pm	Seats (Total: 24) CHM 1407 ESJ 2312	 Lab
8222	Amanda Schech F 11:00am - 11:50am Tu 12:30pm - 3:20pm	Seats (Total: 24) CHM 1407 ESJ 2316	 Lab

8231	Amanda Schech F 11:00am - 11:50am Tu 3:30pm - 6:20pm	Seats (Total: 24) CHM 1407 ESJ 2312	 Lab
8311	Amanda Schech F 11:00am - 11:50am W 9:00am - 11:50am	Seats (Total: 24) CHM 1407 ESJ 2312	 Lab
8321	Amanda Schech F 11:00am - 11:50am W 12:00pm - 2:50pm	Seats (Total: 24) CHM 1407 ESJ 2312	 Lab
8331	Amanda Schech F 11:00am - 11:50am W 3:00pm - 5:50pm	Seats (Total: 24) CHM 1407 ESJ 2312	 Lab
8431	Amanda Schech F 11:00am - 11:50am Th 3:30pm - 6:20pm	Seats (Total: 24) CHM 1407 ESJ 2312	 Lab
8521	Amanda Schech F 11:00am - 11:50am F 12:00pm - 2:50pm	Seats (Total: 24) CHM 1407 ESJ 2312	 Lab
9112	Amanda Schech F 12:00pm - 12:50pm M 9:00am - 11:50am	Seats (Total: 12) CHM 1407 ESJ 2312	 Lab
9121	Amanda Schech F 12:00pm - 12:50pm M 12:00pm - 2:50pm	Seats (Total: 24) CHM 1407 ESJ 2312	 Lab
9131	Amanda Schech F 12:00pm - 12:50pm M 3:00pm - 5:50pm	Seats (Total: 24) CHM 1407 ESJ 2312	 Lab
9212	Amanda Schech F 12:00pm - 12:50pm Tu 9:30am - 12:20pm	Seats (Total: 24) CHM 1407 ESJ 2316	 Lab

9221	Amanda Schech F 12:00pm - 12:50pm Tu 12:30pm - 3:20pm	Seats (Total: 24) CHM 1407 ESJ 2312	Lab
9232	Amanda Schech F 12:00pm - 12:50pm Tu 3:30pm - 6:20pm	Seats (Total: 24) CHM 1407 ESJ 2316	Lab
9322	Amanda Schech F 12:00pm - 12:50pm W 12:00pm - 2:50pm	Seats (Total: 24) CHM 1407 ESJ 2316	Lab
9332	Amanda Schech F 12:00pm - 12:50pm W 3:00pm - 5:50pm	Seats (Total: 24) CHM 1407 ESJ 2316	Lab
9421	Amanda Schech F 12:00pm - 12:50pm Th 12:30pm - 3:20pm	Seats (Total: 24) CHM 1407 ESJ 2312	Lab
9422	Amanda Schech F 12:00pm - 12:50pm Th 12:30pm - 3:20pm	Seats (Total: 24) CHM 1407 ESJ 2316	Lab
9432	Amanda Schech F 12:00pm - 12:50pm Th 3:30pm - 6:20pm	Seats (Total: 24) CHM 1407 ESJ 2316	Lab
9531	Amanda Schech F 12:00pm - 12:50pm F 3:00pm - 5:50pm	Seats (Total: 24) CHM 1407 ESJ 2312	Lab
SES1	Jason Kahn M 8:00pm - 8:50pm W 7:30pm - 10:20pm *Restricted to students in the Science in the Evening program.*	Seats (Total: 24) PLS 1121 ESJ 2312	Lab

CHEM276 **General Chemistry and Energetics - Majors**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM241 and CHEM242; or minimum grade of C- in CHEM247. Corequisite: CHEM277. Restriction: Must be in one of the following programs (Chemistry; Biochemistry). Credit only granted for: CHEM113, CHEM153, CHEM271 or CHEM276. Formerly: CHEM153.

An introduction to the physical aspects of chemistry for Biochemistry and Chemistry majors. Chemical kinetics, thermodynamics and electrochemistry in the context of current chemistry research.

0224	Andrei Vedernikov WF 9:00am - 9:50am Tu 9:30am - 10:20am	Seats (Total: 45) ATL 2400 CHM 1224	 Discussion
0225	Andrei Vedernikov WF 9:00am - 9:50am Th 9:30am - 10:20am	Seats (Total: 45) ATL 2400 CHM 1224	 Discussion

CHEM277 **Fundamentals of Analytical and Bioanalytical Chemistry Laboratory**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CHEM241 and CHEM242; or minimum grade of C- in CHEM247. Corequisite: CHEM276. Restriction: Must be in one of the following programs (Chemistry; Biochemistry). Credit only granted for: CHEM153, CHEM227, CHEM272 or CHEM277.

Quantitative analysis, inorganic analytical chemistry, and an introduction to bio-analytical instrumentation and techniques.

Students must pay a $40.00 lab materials fee.

8111	Jason Kahn M 9:00am - 9:50am MW 12:00pm - 2:50pm	Seats (Total: 18) ATL 2400 ESJ 0312	 Lab
8121	Jason Kahn M 9:00am - 9:50am TuTh 12:30pm - 3:20pm	Seats (Total: 18) ATL 2400 ESJ 0312	 Lab
8122	Jason Kahn M 9:00am - 9:50am TuTh 3:30pm - 6:20pm	Seats (Total: 18) ATL 2400 ESJ 0312	 Lab
8131	Jason Kahn M 9:00am - 9:50am WF 3:00pm - 5:50pm	Seats (Total: 18) ATL 2400 ESJ 0312	 Lab

CHEM395 **Professional Issues in Chemistry and Biochemistry**

Credits: 1 Grading Method: Sat-Fail

Restriction: Junior standing or higher; and must be in one of the following programs (Chemistry; Biochemistry).

Seminar on professional issues. Professional responsibilities, ethics, interview techniques, career opportunities, graduate/professional school, race and gender issues.

0101	Janice Reutt-Robey	Seats (Total: 113)
	Tu 11:00am - 11:50am	CHM 1402

CHEM398 **Special Projects**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Honors projects for undergraduate students.

Limited to chemistry honors students. Consult with Dr. Montague-Smith.

Contact department for information to register for this course.

CHEM399A **Introduction to Chemical Research**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Basic (chemical) research conducted under the supervision of a faculty member.

Contact department for information to register for this course.

CHEM399B **Introduction to Chemical Research**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Basic (chemical) research conducted under the supervision of a faculty member.

Contact department for information to register for this course.

CHEM399C **Introduction to Chemical Research**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Basic (chemical) research conducted under the supervision of a faculty member.

Contact department for information to register for this course.

CHEM399X **Introduction to Chemical Research**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Basic (chemical) research conducted under the supervision of a faculty member.

Prerequsite: permission of department.

0101	Michael Montague-Smith Contact instructor or department for details.	Seats (Total: 15)
0102	Lee Friedman Contact instructor or department for details.	Seats (Total: 30)

CHEM401 **Inorganic Chemistry**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM276 or CHEM271; and (CHEM247 or CHEM241).

An overview of basic concepts of the electronic structure of the elements, chemical bonding and reactivity, from simple diatomic molecules to coordination compounds. These are viewed from simple (Lewis) to the most comprehensive molecular orbital theory. Symmetry and group theory are used throughout the course.

0101	Efrain Rodriguez MWF 2:00pm - 2:50pm	Seats (Total: 100) PLS 1140

CHEM425 **Instrumental Methods of Analysis**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM272 and CHEM271; or (CHEM276 and CHEM277).

Modern instrumentation in analytical chemistry. Electronics, spectroscopy, chromatography and electrochemistry.

Students must pay a $40.00 lab materials fee.

0101	Natalia White MW 11:00am - 11:50am MW 1:00pm - 3:50pm	Seats (Total: 12) CHM 1402 CHM 3228	 Lab

0102	Natalia White MW 11:00am - 11:50am TuTh 12:30pm - 3:20pm	Seats (Total: 12) CHM 1402 CHM 3228	 Lab
0104	Natalia White MW 11:00am - 11:50am TuTh 9:30am - 12:20pm	Seats (Total: 12) CHM 1402 CHM 3228	 Lab
0105	Natalia White MW 11:00am - 11:50am MW 6:00pm - 8:50pm	Seats (Total: 12) CHM 1402 CHM 3228	 Lab
0109	Natalia White MW 11:00am - 11:50am TuTh 6:00pm - 8:50pm	Seats (Total: 12) CHM 1402 CHM 3228	 Lab

CHEM433 **Atmospheric Chemistry and Climate**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131, CHEM135, or CHEM146. And MATH241; or permission of CMNS-Chemistry & Biochemistry department. Also offered as: AOSC433. Credit only granted for: AOSC433, AOSC633, CHEM433, or CHEM633. Formerly: CHEM434.

The effects of human activity on atmospheric composition, focused on global warming, the carbon cycle, air pollution, and the ozone layer. Fundamentals of atmosphereic chemistry (spectroscopy, kinetics, isotopic analysis, and biogeochemical cycles) are related to the modern understanding of climate change, air quality, and ozone depletion, based on resources such as satellite missions, field campaigns, and scientific assessments published by international agencies. We also examine how society's energy needs could be met, in the future, in a manner with less impact on atmospheric composition than the present heavy reliance on combusion of fossil fuels.

0101	Ross Salawitch TuTh 2:00pm - 3:15pm	Seats (Total: 27) ATL 2416

CHEM481 **Physical Chemistry I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM135; or minimum grade of C- in CHEM271 and CHEM272; or minimum grade of C- in CHEM276 and CHEM277. And minimum grade of C- in MATH141. And minimum grade of C- in PHYS260 and PHYS261; or minimum grade of C- in PHYS141.

Thermodynamics and kinetics of chemical and molecular systems. Topics may include internal energy, heat, work, enthalpy, entropy, free energy, and spontaneity as well as reaction order, differential rate laws, integrated rate laws, and rate laws for multi-step processes.

0101	Millard Alexander MWF 9:00am - 9:50am	Seats (Total: 70) CHM 1402	

CHEM482 **Physical Chemistry II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM481.

Quantum mechanical nature of atoms and molecules. Topics may include model systems for electronic, vibrational, rotational and translational energies as well as connections to molecular spectroscopy and thermal distributions.

0101	Elizabeth Griffith MWF 9:00am - 9:50am	Seats (Total: 54) ESJ 1215	

CHEM483 **Physical Chemistry Laboratory I**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in CHEM481.

An introduction to the principles and application of quantitative techniques in physical chemical measurements. Experiments will be coordinated with topics in CHEM481.

Students must pay a $40.00 lab materials fee.

0102	Earle Stone Tu 8:00am - 8:50am W 10:00am - 12:50pm	Seats (Total: 18) PLS 1130 CHM 3225	 Lab
0103	Earle Stone Tu 8:00am - 8:50am W 2:00pm - 4:50pm	Seats (Total: 18) PLS 1130 CHM 3225	 Lab
0104	Earle Stone Tu 8:00am - 8:50am Th 2:00pm - 4:50pm	Seats (Total: 18) PLS 1130 CHM 3225	 Lab

CHEM484 **Physical Chemistry Laboratory II**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM481 and CHEM483; and must have completed or be concurrently enrolled in CHEM482.

A continuation of CHEM 483. Advanced quantitative techniques necessary in physical chemical measurements. Experiments will be coordinated with topics in CHEM 482.

Rooms for second lab times are to be arranged for all sections. Students must pay a $40.00 lab materials fee.

0101	Earle Stone Tu 9:30am - 10:20am Tu 3:00pm - 5:50pm	Seats (Total: 14) CHM 0127 CHM 3221	 Lab
0103	Earle Stone Tu 9:30am - 10:20am W 3:00pm - 5:50pm	Seats (Total: 16) CHM 0127 CHM 3221	 Lab

CHEM623 **Optical Methods of Quantitative Analysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CHEM482; or students who have taken courses with comparable content may contact the department.

The quantitative applications of various methods of optical spectroscopy.

0101	Neil Blough MWF 2:00pm - 2:50pm	Seats (Total: 17) CHM 0128

CHEM647 **Organic Synthesis**

Credits: 3 Grading Method: Regular, Audit

The use of new reagents in organic reactions; multistep syntheses leading to natural products of biological interest; stereospecific and regiospecific reactions and their use in total synthesis.

0101	Philip DeShong MWF 9:00am - 9:50am	Seats (Total: 20) CHM 0124

CHEM648G **Special Topics in Organic Chemistry; Introduction to Chemical Biology**

Credits: 3 Grading Method: Regular, Audit

Topics of special interest and current importance.

Prerequisite: One-year organic chemistry (Chem231 and Chem241 or equivalent) and a basic understanding of biochemistry (one semester of general biochemistry). Chemical biology involves the application of chemical approaches to the study and manipulation of biological systems, as well as the harnessing of biology to advance chemistry. This course will first highlight the chemical basis of functions of major biopolymers(DNA/RNA, proteins, glycans, and lipids), and then focus on chemical approaches to deciphering biological functions through case studies.

0101	Lai-Xi Wang	Seats (Total: 20)
	MW 11:00am - 12:15pm	CHM 0124

CHEM648K **Special Topics in Organic Chemistry; Electrochemical Energy Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Topics of special interest and current importance.

0101	Instructor: TBA	Seats (Total: 5)
	MW 11:00am - 12:15pm	JMP 2222

CHEM650 **Problems in Organic Synthesis**

Credits: 1 Grading Method: Regular, Audit

A tutorial type course dealing with mechanistic problems from the current literature of organic sysnthesis.

0101	Philip DeShong	Seats (Total: 20)
	F 12:00pm - 12:50pm	CHM 0124

CHEM687 **Statistical Mechanics and Chemistry**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CHEM684; or students who have taken courses with comparable content may contact the department.

0101	Pratyush Tiwary	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	PLS 1168

CHEM689L **Special Topics in Physical Chemistry; LabView Programming for Instrument Control and Data Analysis**

Credits: 3 Grading Method: Regular, Audit

0101	John Fourkas	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	CHM 3222

CHEM699 **Special Problems in Chemistry**

Credits: 1-6 Grading Method: Regular, Audit

Laboratory experience in a research environment.

Open only to non-thesis Master's degree candidates.

Contact department for information to register for this course.

CHEM703 **Introduction to Nonequilibrium Statistical Physics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS603 or CHEM687; or permission of instructor. Credit only granted for: CHPH703, CHPH718B, CHEM703, CHEM718B, PHYS703, OR PHYS798Z. Formerly: CHEM718B.

Analysis and microscopic modeling of systems away from thermal equilibrium. Linear response theory, ergodicity, Brownian motion, Monte Carlo modeling, thermal ratchets, far-from-equilibrium fluctuation relations. Introduction to the theoretical tools of nonequilibrium phenomena and their application to problems in physics, chemistry and biology.

0101	Instructor: TBA	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	CHM 0127

CHEM705 **Nuclear Chemistry**

Credits: 3 Grading Method: Regular, Audit

Nuclear structure models, radioactive decay processes, nuclear reactions in complex nuclei, fission, nucleosynthesis and nuclear particle accelerators.

0101	Alice Mignerey	Seats (Total: 15)
	MW 4:00pm - 5:15pm	CHM 0124

CHEM799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

CHEM889A **Seminar; Analytical, Nuclear and Environmental Chemistry**

Credits: 1 Grading Method: Regular, Audit

0101	YuHuang Wang	Seats (Total: 25)
	F 3:00pm - 5:00pm	CHM 0112

CHEM889C **Seminar; Inorganic Chemistry**

Credits: 1 Grading Method: Regular, Audit

0101	Osvaldo Gutierrez	Seats (Total: 15)
	Th 11:00am - 11:50am	CHM 0112

CHEM889D **Seminar; Organic Chemistry**

Credits: 1 Grading Method: Regular, Audit

0101	Osvaldo Gutierrez	Seats (Total: 25)
	Th 11:00am - 11:50am	CHM 0112

CHEM889E **Seminar; Physical Chemistry**

Credits: 1 Grading Method: Regular, Audit

Also offered as CHEM889F and CHPH709A. Credit granted for CHEM889E, CHEM889F, or CHPH709A.

0101	YuHuang Wang	Seats (Total: 15)
	W 11:00am - 11:50am	CHM 0112

CHEM889F **Seminar; Chemical Physics**

Credits: 1 Grading Method: Regular, Audit

Also offered as CHEM889E and CHPH709A. Credit granted for CHEM889F, CHEM 889E, or CHPH709A.

0101	YuHuang Wang	Seats (Total: 15)
	W 11:00am - 11:50am	CHM 0112

CHEM889G **Seminar; Physical Organic Chemistry**

Credits: 1 Grading Method: Regular, Audit

0101	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

CHEM889M **Seminar; Materials Chemistry**

Credits: 1 Grading Method: Regular, Audit

Contact department for information to register for this course.

CHEM898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

CHEM899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

CHIN Chinese Spring 2019

CHIN102 **Elementary Spoken Chinese**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CHIN101; or students who have taken courses with comparable content may contact the department; or must have attained appropriate Foreign Language Placement Test (FLPT) score. Corequisite: CHIN103. Additional information: Must be taken in conjunction with CHIN 103.

Continued study of grammatical patterns and vocabulary buildup with particular emphasis on conversation.

0101	Guiling Hu MWF 10:00am - 10:50am	Seats (Total: 15) JMZ 1117
0201	Guiling Hu MWF 2:00pm - 2:50pm	Seats (Total: 15) JMZ 1226

CHIN103 **Elementary Written Chinese**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CHIN101; or students who have taken courses with comparable content may contact the department; or must have attained appropriate Foreign Language Placement Test (FLPT) score. Corequisite: CHIN102. Additional information: Must be taken in conjunction with CHIN102.

Continued study of grammatical patterns and buildup of vocabulary with particular emphasis on reading and writing.

0101	Jungjung Lee-Heitz TuTh 9:30am - 10:45am	Seats (Total: 15) JMZ 2120
0201	Jungjung Lee-Heitz TuTh 12:30pm - 1:45pm	Seats (Total: 15) JMZ 2120

CHIN169A **Special Topics in Study Abroad I; Elementary Chinese I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN169B **Special Topics in Study Abroad I; Elementary Chinese II**

Credits: 3-4 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN201 **Intermediate Spoken Chinese I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: CHIN102; or must have attained appropriate Foreign Language Placement Test (FLPT) score. Corequisite: CHIN202. Additional information: Must be taken in conjunction with CHIN202.

Emphasis on development of conversational skills with vocabulary build-up and controlled conversation.

Contact department for information to register for this course.

CHIN202 **Intermediate Written Chinese I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: CHIN103; or must have attained appropriate Foreign Language Placement Test (FLPT) score. Corequisite: CHIN201. Additional information: Must be taken in conjunction with CHIN201.

Reading and writing skills with emphasis on grammar and Chinese characters.

Contact department for information to register for this course.

CHIN203 **Intermediate Spoken Chinese II**

(Perm req)

Credits: 3 Grading Method: Regular CORE: HO

Prerequisite: CHIN201; or students who have taken courses with comparable content may contact the department; or must have attained appropriate Foreign Language Placement Test (FLPT) score. Corequisite: CHIN204. Additional information: Must be taken in conjunction with CHIN204.

Continuation of CHIN201.

0101	Yuli Wang MWF 10:00am - 10:50am	Seats (Total: 15) JMZ 1124
0201	Yuli Wang MWF 11:00am - 11:50am	Seats (Total: 15) JMZ 0205

CHIN204 **Intermediate Written Chinese II**

(Perm req)

Credits: 3 Grading Method: Regular CORE: HO

Prerequisite: CHIN202; or students who have taken courses with comparable content may contact the department; or must have attained appropriate Foreign Language Placement Test (FLPT) score. Corequisite: CHIN203. Additional information: Must be taken in conjunction with CHIN203.

Continuation of CHIN202.

0101	Jungjung Lee-Heitz TuTh 11:00am - 12:15pm	Seats (Total: 15) JMZ 2120

0201	Jungjung Lee-Heitz	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	JMZ 2125

CHIN269A **Special Topics in Study Abroad II; Introduction to Beijing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN269C **Special Topics in Study Abroad II; Modern Chinese Culture and Society I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN269D **Special Topics in Study Abroad II; Chinese Conversation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN269J **Special Topics in Study Abroad II; Intermediate Chinese**

Credits: 2-3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN269K **Special Topics in Study Abroad II; Intermediate Chinese II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN269P **Special Topics in Study Abroad II; The China Phenomenon**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN269V **Special Topics in Study Abroad II; Chinese Calligraphy I**

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN269W **Special Topics in Study Abroad II; Chinese Calligraphy II**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN269Z **Special Topics in Study Abroad II; Modern Chinese Culture and Society**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN301 **Advanced Chinese I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHIN202; or students who have taken courses with comparable content may contact the department. And must have taken a placement interview offered by the department for Non-majors.

Readings in expository and fictional writing with conversation and composition.

Contact department for information to register for this course.

CHIN302 **Advanced Chinese II**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CHIN301; or students who have taken courses with comparable content may contact the department. And must have taken a placement interview offered by the department for Non-majors.

Continuation of CHIN301.

0101	Guiling Hu	Seats (Total: 15)
	MWF 1:00pm - 1:50pm	JMZ 0120

CHIN306 **Life in China through TV Plays II**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CHIN305; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Continuation of CHIN305 using authentic Chinese language material in TV plays to learn about society and life in China.

0101	Yuli Wang	Seats (Total: 15)
	MWF 1:00pm - 1:50pm	JMZ 0122

CHIN315 **Modern Chinese Literature in Translation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DSHU

Major works of fiction and drama from 1920 to the present read in the context of social and literary change. Emphasis on western and traditional Chinese influences on the writers and their works. No knowledge of Chinese required.

0101	Satoru Hashimoto	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	JMZ 3205

CHIN331 **Chinese Calligraphy: Theory and Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHIN220; or permission of instructor.

History of the writing system; major scripts, modes, and styles. Intermediate brushwork and lectures on the culture. Characters for practice selected to correspond to lecture topics. Taught in English.

0101	Yuli Wang	Seats (Total: 20)
	Tu 2:00pm - 4:30pm	JMZ 0205

CHIN369A **Special Topics in Study Abroad III; China Practicum and Connecting Across Cultures**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN369B **Special Topics in Study Abroad III; Advanced Chinese I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN369C **Special Topics in Study Abroad III; Advanced Chinese II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN369D **Special Topics in Study Abroad III; Advanced Chinese III**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN369E **Special Topics in Study Abroad III; Advanced Chinese IV**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN369F **Special Topics in Study Abroad III; Advanced Chinese V**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN369G **Special Topics in Study Abroad III; Advanced Chinese VI**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN369I **Special Topics in Study Abroad III; Advanced Chinese VII**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN369J **Special Topics in Study Abroad III; Advanced Chinese VIII**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN369M **Special Topics in Study Abroad III; Modern Chinese Culture II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CHIN386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Must have learning proposal approved by the Office of Experiential Learning Programs, faculty sponsor, and student's internship sponsor. Restriction: Junior standing or higher.

Contact department for information to register for this course.

CHIN401 **Readings in Modern Chinese I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHIN302; or students who have taken courses with comparable content may contact the department. And must have taken a placement interview offered by the department for Non-majors.

Readings in history, politics, economics, sociology, and literature. Emphasis on wide-ranging, rapid reading, reinforced by conversations and compositions.

Contact department for information to register for this course.

CHIN402 **Readings in Modern Chinese II**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CHIN401; or students who have taken courses with comparable content may contact the department. And must have taken a placement interview offered by the department for Non-majors.

Continuation of CHIN401.

0101	Guiling Hu	Seats (Total: 15)
	MWF 11:00am - 11:50am	JMZ 1226

CHIN418J **Special Topics in Contemporary Chinese Fiction and Film; Chinese Film and Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Various approaches to the most recent textual productions of China and Taiwan. Taught in Chinese.

Survey of representative works of Chinese cinema. The course explores a full breadth of the history of Chinese cinema from the early 20th century to date, by covering works by Mainland, Taiwanese, and Hong Kong directors, from Kungfu spectacle to revolutionary aesthetics, national to cosmopolitan discourses, and aesthetics of nostalgia to documentary. The course is taught in English.

0101	Satoru Hashimoto	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	JMZ 3205

CHIN429G **Selected Topics in Chinese Studies; Ethnic and Cultural Diversity in China**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

In-depth study of a particular aspect of Chinese cultural, linguistic, literary studies. Specific topic to be announced when course is offered. Taught in English.

Taught in English.

0101	Minglang Zhou	Seats (Total: 25)
	TuTh 9:30am - 10:45am	JMZ 1122

CHIN499 **Directed Study in Chinese**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Readings in Chinese under faculty supervision.

Contact department for information to register for this course.

CHIN499A **Directed Study in Chinese; Advanced Chinese V**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Readings in Chinese under faculty supervision.

Contact department for information to register for this course.

CHIN499C **Directed Study in Chinese; Advanced Chinese VI**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Readings in Chinese under faculty supervision.

Contact department for information to register for this course.

CHPH Chemical Physics Spring 2019

CHPH618 **Special Projects in Chemical Physics**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Independent reading and study covering chemical physics subject areas not available in other courses.

Contact department for information to register for this course.

CHPH709A **Seminar in Chemical Physics; Physical Chemistry**

Credits: 1 Grading Method: Regular, Audit

Current research and developments in chemical physics.

Also offered as CHEM 889E and CHEM 889F. Credit granted for CHPH709A, CH EM889E, or CHEM889F.

0101	YuHuang Wang	Seats (Total: 15)
	W 11:00am - 11:50am	CHM 0112

CHPH709B **Seminar in Chemical Physics; Statistical Physics**

Credits: 1 Grading Method: Regular, Audit

Current research and developments in chemical physics.

Also offered as PHYS709. Credit granted for PHYS709 or CHPH709B.

0101	Zeina Mneimneh	Seats (Total: 30)
	Tu 1:15pm - 2:30pm	IPT 1116

CHPH709L **Seminar in Chemical Physics; Biophysics**

Credits: 1 Grading Method: Regular, Audit

Current research and developments in chemical physics.

Also offered as PHYS798L. Credit granted for PHYS798L or CHPH709L.

0101	Arpita Upadhyaya	Seats (Total: 20)
	M 4:00pm - 5:30pm	CHM 0112

CHPH718E **Special Topics in Chemical Physics; Mesoscopic and Nanoscale Thermodynamics**

Credits: 1-3 Grading Method: Regular, Audit

A discussion of current research problems in chemical physics.

0101	Mikhail Anisimov	Seats (Total: 10)
	TuTh 12:30pm - 1:45pm	EGR 1104

CHPH718F **Special Topics in Chemical Physics; Methods of Statistical Physics**

Credits: 3 Grading Method: Regular, Audit

A discussion of current research problems in chemical physics.

Prerequisite: PHYS414 or equivalent. Credit granted for PHYS602 or PHYS603. Foundations and applications of thermodynamics and statisticalmechanics. Advanced special students require department authorization. Also offered as PHYS603.

0101	Brian Swingle	Seats (Total: 49)
	TuTh 9:30am - 10:45am	PHY 1402

CHPH718I **Special Topics in Chemical Physics; Chemical Physics Rotation**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

A discussion of current research problems in chemical physics.

0201	Garegin Papoian	Seats (Total: 5)
	Contact instructor or department for details.	

CHPH799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

CHPH898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

CHPH899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

CLAS Classics Spring 2019

CLAS169M **Special Topics in Study Abroad I; Myths and Legends**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CLAS170 **Greek and Roman Mythology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Also offered as: RELS170. Credit only granted for: CLAS170 or RELS170. Additional information: This course cannot be taken for language credit.

An introduction to the mythology of ancient Greece and Rome. This cours is particularly recommended for students planning to major in foreign languages, English, history, the fine arts, or journalism. Taught in English.

0101	Francisco Barrenechea	Seats (Total: 25)	
	MW 10:00am - 10:50am Th 9:30am - 10:20am	MMH 1400 SQH 1105	Discussion

0102	Francisco Barrenechea MW 10:00am - 10:50am Th 11:00am - 11:50am	Seats (Total: 25) MMH 1400 SQH 1101	Discussion
0103	Francisco Barrenechea MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) MMH 1400 BPS 1232	Discussion
0104	Francisco Barrenechea MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) MMH 1400 PLS 1113	Discussion
0105	Francisco Barrenechea MW 10:00am - 10:50am Th 12:30pm - 1:20pm	Seats (Total: 25) MMH 1400 SQH 1103	Discussion
0201	Francisco Barrenechea MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 25) MMH 1400 MTH B0427	Discussion
0203	Francisco Barrenechea MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 25) MMH 1400 PLS 1113	Discussion
0204	Francisco Barrenechea MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 25) MMH 1400 PLS 1117	Discussion
0205	Francisco Barrenechea MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 25) MMH 1400 ATL 2416	Discussion

CLAS171 **Classical Myths in Europe**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

The role which Classical Myths have played in the arts, architecture an politics of a major European city. This will only be offered through the study abroad program.

France

Contact department for information to register for this course.

CLAS269Y **Special Topics in Study Abroad II; Investigating Archaelogy Methods and Techniques**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

CLAS289A **Are We Rome?**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS, DSHU, SCIS

America, from its very origins as an independent nation, saw itself as the new Rome: our system of government is built on Roman precedents, our national buildings look as if they came from the Roman Forum, and our leisure activities take us to stadiums modeled on the Colosseum. Our relationship to Rome, however, raises our greatest anxiety: will America fall as Rome did? In 1776, the year of American independence, Edward Gibbon published his History of the Decline and Fall of the Roman Empire ; America has been thinking about the trajectory of our history alongside Rome's from the very beginning.

0101	Gregory Staley MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 22) ESJ 1202 HBK 0103	Discussion
0102	Gregory Staley MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 22) ESJ 1202 HBK 0103	Discussion
0103	Gregory Staley MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 22) ESJ 1202 HBK 0103	Discussion
0104	Gregory Staley MW 12:00pm - 12:50pm Th 9:30am - 10:20am	Seats (Total: 22) ESJ 1202 JMZ 0205	Discussion
0105	Gregory Staley MW 12:00pm - 12:50pm Th 12:30pm - 1:20pm	Seats (Total: 22) ESJ 1202 HBK 0125	Discussion
0106	Gregory Staley MW 12:00pm - 12:50pm Th 11:00am - 11:50am	Seats (Total: 22) ESJ 1202 HBK 0125	Discussion

CLAS309Q **Special Topics in Classical Literature; Queer History of Classics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Readings in translation.

Also offered as HIST328Q, WMST379Q, and LGBT398Q. Credit granted for CLAS309Q, HIST328Q, WMST379Q, and LGBT398Q. In Classics and Queer History, we will explore ancient and modern paradigms of sex, gender, and sexuality and discuss queer uses of and struggles with the past and the idea of the Classical. To do this, we will examine diverse works of ancient Greek and Roman literature and visual art, as well as works from later periods sonnets, operas, novels, films, scholarship, and more that adapt ancient stories and ideas for their own, queer purposes. As we move across time, geography, and cultures, we will keep in mind the over-arching questions, what is queer history, and why might one pursue it?

0101	Robert Matera MWF 2:00pm - 2:50pm	Seats (Total: 30) VMH 1207

CLAS330 **Ancient Greek Religion: Gods, Myths, Temples**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DSHS, DSHU

Also offered as: RELS370. Credit only granted for: CLAS330 or RELS370.

Survey of Greek religious ideas and practices as they evolve from the Bronze Age to the early Christian period.

For Spring 2019: Also offered as HIST328V and RELS370. Credit only granted for CLAS330, HIST328V, or RELS370.

0101	Jorge Bravo TuTh 2:00pm - 3:15pm	Seats (Total: 35) KEY 0116

CLAS419B **The Classical Tradition; The Classical Tradition in Spain and Latin America**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examination of the role of Greek and Roman civilization in shaping the arts and ideas of western culture.

Also offered as LASC448O and SPAN418C. Credit granted for CLAS419B, LASC448O or SPAN418C. A survey of the reception of Classical literature in the Spanish-speaking world, with a particular focus on ancient drama. We read select literary works in translation, ranging from Renaissance Spain to contemporary Latin America, side-by-side with their classical models, to examine what is culturally unique about their choice of authors, themes, and adaptation of the material. Students have the option of reading some works in the original.

0101	Francisco Barrenechea	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	SQH 1105

CLAS499 **Independent Study in Classical Languages and Literatures**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

CLAS499P **Independent Study in Classical Languages and Literatures; Classical Myth in Europe**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

CLAS699 **Independent Study in Classical Civilization**

Credits: 1-3 Grading Method: Regular, Audit

0401	Lillian Doherty	Seats (Total: 1)
	Contact instructor or department for details.	

CLFS Chemical and Life Sciences Spring 2019

CLFS608 **Seminar in Current Topics in Chemical and Life Science; Scholarly Paper**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Seminar in current topics in the Life Sciences. Contact Program Directo or instructor before registering.

Contact Dr. Brett Kent (bkent@umd.edu) to establish a mentor; and then contact the Office of Extended Studies (oes@umd.edu) to register.

Contact department for information to register for this course.

CLFS608A **Seminar in Current Topics in Chemical and Life Science; Independent Research**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Seminar in current topics in the Life Sciences. Contact Program Directo or instructor before registering.

Contact the Office of Extended Studies (oes@umd.edu) to register.

Contact department for information to register for this course.

CLFS619B **Special Topics in Chemistry; Environmental Chemistry**

Credits: 3

Grading Method: Regular, Audit

Topics of current interest and special importance.

Must be in Master of Chemical & Life Sciences Program; for permission to enroll, contact oes@umd.edu

PL01	Marjan Alaghmand	Seats (Total: 15)
	Meets February 25, 2019 - May 17, 2019	
	Class time/details on ELMs	ONLINE

CLFS665 **Ecology and Global Change**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: LFSC609C or LFSC665. Formerly: LFSC609C.

Ecological concepts across scales ranging from the individual, to populations, communities, ecosystems, and landscapes will be presented. Global change issues will encompass alteration of atmospheric trace gases, biogeochemistry cycles, land use changes, and introduction of non-native species to new habitats.

Must be in Master of Chemical & Life Sciences Program; for permission to enroll, contact oes@umd.edu

Click here for more course information.

PL01	Marcia Shofner	Seats (Total: 15)
	Meets February 25, 2019 - May 17, 2019	
	Class time/details on ELMs	ONLINE

CLFS690 **Biochemistry**

Credits: 3

Grading Method: Regular, Audit

An advanced overview of general biochemistry including a study of protein structure and their physical properties; how these properties relate to catalysis, regulation of catalysis and metabolic chemistry with respect to their relationship to physiological conditions.

Must be in Master of Chemical & Life Sciences Program; for permission to enroll, contact oes@umd.edu

Click here for more course information.

PL01	David Jollie	Seats (Total: 15)
	Meets February 25, 2019 - May 17, 2019	
	Contact instructor or department for details.	

CMLT Comparative Literature Spring 2019

CMLT235 **Black Diaspora Literature and Culture**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL, D	General Education: DSHU, DVUP

Credit only granted for: CMLT235 or ENGL235.

Examination of key works by writers of the African Diaspora. Relationship among black people across multiple geographic spaces; Africa, the Caribbean, the United States, Europe, Latin America, and Asia. Specific historical, cultural, and literary contexts; themes such as gender, sexuality, migration, slavery, freedom, and equality. Readings may include literary texts (fiction, poetry, drama), music and film. All readings in English, but drawn from multiple languages of the black diaspora, including English, Spanish, French and Portuguese.

0101	Keisha Allan	Seats (Total: 30)
	MWF 2:00pm - 2:50pm	KEY 0121

CMLT242 **Introduction to Jewish Literature**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSHU, DVUP

Also offered as: JWST272. Credit only granted for: HEBR231, JWST272, or CMLT242. Formerly: HEBR231.

A survey of Jewish literature and introduction to methods of reading literature in general and Jewish literature in particular. Concern with what makes a literary corpus Jewish and other issues of canonicity. All texts in English translation.

Also offered as JWST272 and ISRL249G. Credit only granted for JWST272, ISRL249G, or CMLT242.

0101	Adi Mahalel TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 40) TYD 1108 ONLINE

CMLT270 **Global Literature and Social Change**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU, DVUP

Comparative study of literature through selected literary works from several non-Western cultures, viewed cross-culturally in light of particular social, political, and economic perspectives.

0201	Uchechi Okereke-Beshel TuTh 12:30pm - 1:45pm	Seats (Total: 30) JMZ 1224
0301	Nahid Ahmadian TuTh 2:00pm - 3:15pm	Seats (Total: 30) KEY 0121

CMLT275 **World Literature by Women**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU, DVUP

Also offered as: WMST275. Credit only granted for: CMLT275 or WMST275.

Comparative study of selected works by women writers of several countries, exploring points of intersection and divergence in women's literary representations.

0101	Norrell Edwards TuTh 12:30pm - 1:45pm	Seats (Total: 30) JMZ 0205
0201	Sarah Humud MWF 10:00am - 10:50am	Seats (Total: 30) KEY 0121

CMLT277 **Literatures of the Americas**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU, DVUP

Comparative study of several North, South, and Central American culture with a focus on the specificities, similarities, and divergences of their literary and cultural texts.

Contact department for information to register for this course.

CMLT280 **Film Art in a Global Society**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA, D | General Education: DSHU, DVUP

Comparative study of a variety of film traditions from around the world including cinema from Hollywood, Europe, Asia and developing countries, with a stress on different cultural contexts for film-making and viewing.

Also offered as: FILM298D. Credit only granted for: CMLT280 or FILM289D.

0101	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	W 5:00pm - 7:30pm	TWS 0320	Lab
	F 12:00pm - 12:50pm	TWS 0236	Discussion
0102	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	W 5:00pm - 7:30pm	TWS 0320	Lab
	F 1:00pm - 1:50pm	TWS 1107	Discussion
0103	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	W 5:00pm - 7:30pm	TWS 0320	Lab
	F 9:00am - 9:50am	TWS 0201	Discussion
0104	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	W 5:00pm - 7:30pm	TWS 0320	Lab
	F 1:00pm - 1:50pm	TWS 0221	Discussion

CMLT298B **Topics in Comparative Studies; Francophone Writers of Africa and the African Diaspora**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Also offered as FREN242. Credit granted for CMLT298B or FREN242. An analysis of the works and ideas of 20th and 21st century Francophone writers (Africa, the Caribbeans, France). Taught in English.

0101	Valerie Orlando	Seats (Total: 30)	
	MW 2:00pm - 3:15pm	JMZ 2122	

CMLT386 **Experiential Learning**

(Perm req)

Credits: 3-6 | Grading Method: Regular, Pass-Fail

Restriction: Junior standing or higher; and permission of ARHU-English department.

Contact department for information to register for this course.

CMLT398C **Special Topics in Comparative Studies; Cinema of Liberation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in comparitive studies.

Also offered as ENGL329A. Credit granted for CMLT398C or ENGL329A. Repeatable to 9 credits if content differs.

0201	Eugene Robinson	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

CMLT398D **Special Topics in Comparative Studies; The Jazz Paradigm**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in comparitive studies.

Also offered as ENGL379R. Credit granted for CMLT398D or ENGL379R.

0201	Eugene Robinson	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

CMLT398G **Special Topics in Comparative Studies; Lyrics of Mystical Love: Rumi, Song of Songs, and St. Teresa of Avila to Mirabai and Manhae**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in comparitive studies.

Also offered as PERS398M and RELS319M. Credit granted for PERS398M, RELS319M, or CMLT398G. A journey through the mystical love poetry of some of the world's most important Jewish, Christian, Muslim, Hindu, and Buddhist mystical poets. Close reading of these poetic masterpieces alongside modern studies of mysticism and mystical poetry by scholars of literature, religious studies, and cognitive science. Taught in English.

0101	Matthew Miller	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	JMZ 1224

CMLT679Z **Topics in Comparative Studies; Nuclear Futures: Theorizing Environmental Humanities for the Post - Fukushima Age**

Credits: 3 Grading Method: Regular, Audit

Seminar in modern and contemporary literature: as announced.

Also offered as GERM689Z, SLLC698Z and FREN699Z. Credit granted for GERM689Z, CMLT679Z, SLLC698Z or FREN699Z. This seminar interrogates the concept of futurity in the context of environmental activism and artistic engagement with atomic issues from 1945 to the present, focusing on Germany and Japan. We will engage with theoretical developments in the environmental humanities, including readings on the Anthropocene, precarity, and neoliberal capitalism. The course draws on a wide range of written materials and media, including personaltestimonies, poetry, fiction, film, manga, music, performance and documentation of protests. Taught in English.

0101	Hester Baer, Michele Mason	Seats (Total: 20)
	W 4:30pm - 7:00pm	JMZ 3203

CMLT699 **Independent Study**

(Perm req)

Credits: 1-6 Grading Method: Regular

Research and writing on specific readings on a topic selected by the student which is approved and supervised by a faculty member.

Contact department for information to register for this course.

CMLT799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

CMLT898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

CMLT899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

CMSC Computer Science Spring 2019

CMSC122 **Introduction to Computer Programming via the Web**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE | General Education: DSSP

Restriction: Must not have completed any courses from CMSC131-499 course range; and must not be concurrently enrolled in CMSC131. Credit only granted for: CMSC106, or CMSC122.

Introduction to computer programming in the context of developing full featured dynamic web sites. Uses a problem solving approach to teach basics of program design and implementation using JavaScript; relates these skills to creation of dynamic web sites; then explores both the potential and limits of web-based information sources for use in research. Intended to help relate a student's major to these emerging technologies.

0101	Brian Brubach MWF 2:00pm - 2:50pm	Seats (Total: 85) IRB 1116	
0201	Pedram Sadeghian MWF 12:00pm - 12:50pm	Seats (Total: 170) SHM 2102	

CMSC131 **Object-Oriented Programming I**

(Perm req)

Credits: 4 Grading Method: Regular

Corequisite: MATH140.

Introduction to programming and computer science. Emphasizes understanding and implementation of applications using object-oriented techniques. Develops skills such as program design and testing as well as implementation of programs using a graphical IDE. Programming done in Java.

0101	Ilchul Yoon MWF 1:00pm - 1:50pm MW 5:00pm - 5:50pm	Seats (Total: 32) CSI 1115 CSI 3118	 Discussion
0102	Ilchul Yoon MWF 1:00pm - 1:50pm MW 2:00pm - 2:50pm	Seats (Total: 38) CSI 1115 CSI 1121	 Discussion
0103	Ilchul Yoon MWF 1:00pm - 1:50pm MW 3:00pm - 3:50pm	Seats (Total: 32) CSI 1115 CSI 3118	 Discussion
0104	Ilchul Yoon MWF 1:00pm - 1:50pm MW 4:00pm - 4:50pm	Seats (Total: 38) CSI 1115 CSI 2120	 Discussion

0201	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 8:00am - 8:50am	Seats (Total: 38) ESJ 0202 CSI 2120	 Discussion
0202	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 9:00am - 9:50am	Seats (Total: 38) ESJ 0202 CSI 2120	 Discussion
0203	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 10:00am - 10:50am	Seats (Total: 32) ESJ 0202 CSI 2118	 Discussion
0204	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 11:00am - 11:50am	Seats (Total: 32) ESJ 0202 CSI 2118	 Discussion
0205	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 12:00pm - 12:50pm	Seats (Total: 32) ESJ 0202 CSI 2118	 Discussion
0207	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 10:00am - 10:50am	Seats (Total: 32) ESJ 0202 CSI 3118	 Discussion
0208	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 11:00am - 11:50am	Seats (Total: 32) ESJ 0202 CSI 3118	 Discussion
0209	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 9:00am - 9:50am	Seats (Total: 32) ESJ 0202 CSI 2118	 Discussion
0301	Ilchul Yoon MWF 10:00am - 10:50am MW 1:00pm - 1:50pm	Seats (Total: 38) SKN 0200 CSI 2120	 Discussion
0302	Ilchul Yoon MWF 10:00am - 10:50am MW 4:00pm - 4:50pm	Seats (Total: 32) SKN 0200 CSI 3118	 Discussion

0303	Ilchul Yoon MWF 10:00am - 10:50am MW 5:00pm - 5:50pm	Seats (Total: 32) SKN 0200 CSI 2118	Discussion
0305	Ilchul Yoon MWF 10:00am - 10:50am MW 3:00pm - 3:50pm	Seats (Total: 38) SKN 0200 CSI 2120	Discussion
0306	Ilchul Yoon MWF 10:00am - 10:50am MW 12:00pm - 12:50pm	Seats (Total: 45) SKN 0200 CSI 3117	Discussion
0307	Ilchul Yoon MWF 10:00am - 10:50am MW 2:00pm - 2:50pm	Seats (Total: 32) SKN 0200 CSI 3118	Discussion

CMSC132 **Object-Oriented Programming II**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC131; or must have earned a score of 5 on the A Java AP exam; or must have earned a satisfactory score on the departmental placement exam. And minimum grade of C- in MATH140.

Introduction to use of computers to solve problems using software engineering principles. Design, build, test, and debug medium -size software systems and learn to use relevant tools. Use object-oriented methods to create effective and efficient problem solutions. Use and implement application programming interfaces (APIs). Programming done in Java.

0101	Laurence Herman MWF 10:00am - 10:50am MW 3:00pm - 3:50pm	Seats (Total: 38) PHY 1412 CSI 2107	Discussion
0102	Laurence Herman MWF 10:00am - 10:50am MW 12:00pm - 12:50pm	Seats (Total: 39) PHY 1412 CSI 2107	Discussion
0103	Laurence Herman MWF 10:00am - 10:50am MW 1:00pm - 1:50pm	Seats (Total: 38) PHY 1412 CSI 2107	Discussion

0104	Laurence Herman MWF 10:00am - 10:50am MW 2:00pm - 2:50pm	Seats (Total: 38) PHY 1412 CSI 2107	Discussion
0105	Laurence Herman MWF 10:00am - 10:50am MW 5:00pm - 5:50pm	Seats (Total: 38) PHY 1412 CSI 2107	Discussion
0106	Laurence Herman MWF 10:00am - 10:50am MW 4:00pm - 4:50pm	Seats (Total: 38) PHY 1412 CSI 2107	Discussion
0107	Laurence Herman MWF 10:00am - 10:50am MW 12:00pm - 12:50pm	Seats (Total: 39) PHY 1412 CSI 1122	Discussion
0108	Laurence Herman MWF 10:00am - 10:50am MW 4:00pm - 4:50pm	Seats (Total: 37) PHY 1412 CSI 1122	Discussion
0201	Fawzi Emad MWF 2:00pm - 2:50pm MW 8:00am - 8:50am	Seats (Total: 34) CSI 1115 CSI 3118	Discussion
0202	Fawzi Emad MWF 2:00pm - 2:50pm MW 9:00am - 9:50am	Seats (Total: 32) CSI 1115 CSI 3118	Discussion
0203	Fawzi Emad MWF 2:00pm - 2:50pm MW 10:00am - 10:50am	Seats (Total: 34) CSI 1115 CSI 1122	Discussion
0204	Fawzi Emad MWF 2:00pm - 2:50pm MW 9:00am - 9:50am	Seats (Total: 44) CSI 1115 CSI 1121	Discussion
0301	Laurence Herman MWF 12:00pm - 12:50pm MW 3:00pm - 3:50pm	Seats (Total: 39) ARM 0135 CSI 1121	Discussion

0302	Laurence Herman MWF 12:00pm - 12:50pm MW 4:00pm - 4:50pm	Seats (Total: 39) ARM 0135 CSI 1121	Discussion
0303	Laurence Herman MWF 12:00pm - 12:50pm MW 3:00pm - 3:50pm	Seats (Total: 33) ARM 0135 CSI 2118	Discussion
0304	Laurence Herman MWF 12:00pm - 12:50pm MW 2:00pm - 2:50pm	Seats (Total: 34) ARM 0135 CSI 2118	Discussion
0305	Laurence Herman MWF 12:00pm - 12:50pm MW 4:00pm - 4:50pm	Seats (Total: 35) ARM 0135 CSI 3120	Discussion
0306	Laurence Herman MWF 12:00pm - 12:50pm MW 5:00pm - 5:50pm	Seats (Total: 35) ARM 0135 CSI 3120	Discussion
0307	Laurence Herman MWF 12:00pm - 12:50pm MW 5:00pm - 5:50pm	Seats (Total: 39) ARM 0135 CSI 1121	Discussion
0401	Fawzi Emad MWF 3:00pm - 3:50pm MW 8:00am - 8:50am	Seats (Total: 37) CSI 1115 CSI 2107	Discussion
0402	Fawzi Emad MWF 3:00pm - 3:50pm MW 9:00am - 9:50am	Seats (Total: 35) CSI 1115 CSI 2107	Discussion
0403	Fawzi Emad MWF 3:00pm - 3:50pm MW 10:00am - 10:50am	Seats (Total: 35) CSI 1115 CSI 2107	Discussion
0404	Fawzi Emad MWF 3:00pm - 3:50pm MW 10:00am - 10:50am	Seats (Total: 35) CSI 1115 CSI 2117	Discussion

CMSC132A Object-Oriented Programming II

(Perm req) Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC131; or must have earned a score of 5 on the A Java AP exam; or must have earned a satisfactory score on the departmental placement exam. And minimum grade of C- in MATH140.

Introduction to use of computers to solve problems using software engineering principles. Design, build, test, and debug medium -size software systems and learn to use relevant tools. Use object-oriented methods to create effective and efficient problem solutions. Use and implement application programming interfaces (APIs). Programming done in Java.

0501	David Van Horn MWF 11:00am - 11:50am MW 12:00pm - 12:50pm	Seats (Total: 25) IRB 2207 IRB 2207	 Discussion
0502	David Van Horn MWF 11:00am - 11:50am MW 4:00pm - 4:50pm	Seats (Total: 25) IRB 2207 IRB 2207	 Discussion

CMSC216 Introduction to Computer Systems

(Perm req) Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC132; and minimum grade of C- in MATH141. Corequisite: CMSC250. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in Engineering: Computer program; or must be in the Computer Science Minor program.

Introduction to the interaction between user programs and the operating system/hardware. Major topics include C programming, introductory systems programming, and assembly language. Other concepts covered include UNIX, machine data representation, thread management, optimization, and virtual memory. Programming is done in the Linux Environment.

0101	A.U. Shankar TuTh 12:30pm - 1:45pm MW 9:00am - 9:50am	Seats (Total: 41) ESJ 2208 IRB 2107	 Discussion
0102	A.U. Shankar TuTh 12:30pm - 1:45pm MW 11:00am - 11:50am	Seats (Total: 40) ESJ 2208 IRB 2107	 Discussion
0103	A.U. Shankar TuTh 12:30pm - 1:45pm MW 10:00am - 10:50am	Seats (Total: 32) ESJ 2208 IRB 2107	 Discussion

0104	A.U. Shankar TuTh 12:30pm - 1:45pm MW 1:00pm - 1:50pm	Seats (Total: 34) ESJ 2208 IRB 2207	Discussion
0201	Nelson Padua-Perez TuTh 2:00pm - 3:15pm MW 3:00pm - 3:50pm	Seats (Total: 40) ESJ 1224 IRB 2107	Discussion
0202	Nelson Padua-Perez TuTh 2:00pm - 3:15pm MW 1:00pm - 1:50pm	Seats (Total: 40) ESJ 1224 IRB 2107	Discussion
0203	Nelson Padua-Perez TuTh 2:00pm - 3:15pm MW 3:00pm - 3:50pm	Seats (Total: 38) ESJ 1224 IRB 2207	Discussion
0204	Nelson Padua-Perez TuTh 2:00pm - 3:15pm MW 4:00pm - 4:50pm	Seats (Total: 38) ESJ 1224 IRB 1207	Discussion
0301	Nelson Padua-Perez TuTh 11:00am - 12:15pm MW 12:00pm - 12:50pm	Seats (Total: 36) SKN 0200 IRB 1207	Discussion
0302	Nelson Padua-Perez TuTh 11:00am - 12:15pm MW 12:00pm - 12:50pm	Seats (Total: 36) SKN 0200 IRB 2107	Discussion
0303	Nelson Padua-Perez TuTh 11:00am - 12:15pm MW 10:00am - 10:50am	Seats (Total: 36) SKN 0200 IRB 2207	Discussion
0304	Nelson Padua-Perez TuTh 11:00am - 12:15pm MW 11:00am - 11:50am	Seats (Total: 36) SKN 0200 IRB 1207	Discussion
0305	Nelson Padua-Perez TuTh 11:00am - 12:15pm MW 9:00am - 9:50am	Seats (Total: 36) SKN 0200 IRB 1207	Discussion

0306	Nelson Padua-Perez TuTh 11:00am - 12:15pm MW 1:00pm - 1:50pm	Seats (Total: 36) SKN 0200 IRB 1207	Discussion
0307	Nelson Padua-Perez TuTh 11:00am - 12:15pm MW 4:00pm - 4:50pm	Seats (Total: 36) SKN 0200 IRB 2107	Discussion
0308	Nelson Padua-Perez TuTh 11:00am - 12:15pm MW 2:00pm - 2:50pm	Seats (Total: 36) SKN 0200 IRB 2207	Discussion

CMSC216H **Introduction to Computer Systems**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC132; and minimum grade of C- in MATH141. Corequisite: CMSC250. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in Engineering: Computer program; or must be in the Computer Science Minor program.

Introduction to the interaction between user programs and the operating system/hardware. Major topics include C programming, introductory systems programming, and assembly language. Other concepts covered include UNIX, machine data representation, thread management, optimization, and virtual memory. Programming is done in the Linux Environment.

0101	Neil Spring TuTh 11:00am - 12:15pm MW 10:00am - 10:50am	Seats (Total: 25) IRB 1207 IRB 1207	Discussion

CMSC250 **Discrete Structures**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC131; and minimum grade of C- in MATH141. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in Engineering: Computer program; or must be in the Computer Science Minor program. Formerly: CMSC150.

Fundamental mathematical concepts related to computer science, includin finite and infinite sets, relations, functions, and propositional logic. Introduction to other techniques, modeling and solving problems in computer science. Introduction to permutations, combinations, graphs, and trees with selected applications.

0101	Clyde Kruskal TuTh 2:00pm - 3:15pm MW 10:00am - 10:50am	Seats (Total: 38) ARM 0126 CSI 3120	Discussion
0102	Clyde Kruskal TuTh 2:00pm - 3:15pm MW 8:00am - 8:50am	Seats (Total: 40) ARM 0126 CSI 1121	Discussion
0103	Clyde Kruskal TuTh 2:00pm - 3:15pm MW 12:00pm - 12:50pm	Seats (Total: 32) ARM 0126 CSI 3118	Discussion
0104	Clyde Kruskal TuTh 2:00pm - 3:15pm MW 1:00pm - 1:50pm	Seats (Total: 32) ARM 0126 CSI 3118	Discussion
0105	Clyde Kruskal TuTh 2:00pm - 3:15pm MW 12:00pm - 12:50pm	Seats (Total: 40) ARM 0126 CSI 2117	Discussion
0106	Clyde Kruskal TuTh 2:00pm - 3:15pm MW 10:00am - 10:50am	Seats (Total: 47) ARM 0126 CSI 1121	Discussion
0107	Clyde Kruskal TuTh 2:00pm - 3:15pm MW 11:00am - 11:50am	Seats (Total: 47) ARM 0126 CSI 1121	Discussion
0201	Mohammad Nayeem Teli TuTh 9:30am - 10:45am MW 8:00am - 8:50am	Seats (Total: 50) CSI 1115 CSI 3117	Discussion
0202	Mohammad Nayeem Teli TuTh 9:30am - 10:45am MW 9:00am - 9:50am	Seats (Total: 50) CSI 1115 CSI 3117	Discussion
0203	Mohammad Nayeem Teli TuTh 9:30am - 10:45am MW 2:00pm - 2:50pm	Seats (Total: 38) CSI 1115 CSI 2120	Discussion

0301	Fawzi Emad TuTh 12:30pm - 1:45pm MW 8:00am - 8:50am	Seats (Total: 32) ESJ 2204 CSI 1122	Discussion
0302	Fawzi Emad TuTh 12:30pm - 1:45pm MW 9:00am - 9:50am	Seats (Total: 35) ESJ 2204 CSI 3120	Discussion
0303	Fawzi Emad TuTh 12:30pm - 1:45pm MW 2:00pm - 2:50pm	Seats (Total: 35) ESJ 2204 CSI 3120	Discussion
0304	Fawzi Emad TuTh 12:30pm - 1:45pm MW 3:00pm - 3:50pm	Seats (Total: 35) ESJ 2204 CSI 3120	Discussion
0401	David Sekora TuTh 3:30pm - 4:45pm MW 11:00am - 11:50am	Seats (Total: 36) CSI 1115 CSI 3120	Discussion
0402	David Sekora TuTh 3:30pm - 4:45pm MW 9:00am - 9:50am	Seats (Total: 36) CSI 1115 CSI 2117	Discussion
0403	David Sekora TuTh 3:30pm - 4:45pm MW 5:00pm - 5:50pm	Seats (Total: 36) CSI 1115 CSI 2117	Discussion

CMSC250H **Discrete Structures**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC131; and minimum grade of C- in MATH141. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in Engineering: Computer program; or must be in the Computer Science Minor program. Formerly: CMSC150.

Fundamental mathematical concepts related to computer science, includin finite and infinite sets, relations, functions, and propositional logic. Introduction to other techniques, modeling and solving problems in computer science. Introduction to permutations, combinations, graphs, and trees with selected applications.

Prerequisite: Minimum grade of C- in CMSC131; and minimum grade of C- in MATH141; and permission of CMNS-Computer Science department.

0101	William Gasarch	Seats (Total: 32)	
	TuTh 3:30pm - 4:45pm MW 5:00pm - 5:50pm	CSI 2107 IRB 2107	Discussion

CMSC298A **Special Topics in Computer Science**

(Perm req)

Credits: 1-4 Grading Method: Sat-Fail

A course designed to allow a lower level student to pursue a specialize topic or project.

Contact department for information to register for this course.

CMSC320 **Introduction to Data Science**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC216 and CMSC250. Restriction: Permission of CMNS-Computer Science department.

An introduction to the data science pipeline, i.e., the end-to-end process of going from unstructured, messy data to knowledge and actionable insights. Provides a broad overview of several topics including statistical data analysis, basic data mining and machine learning algorithms, large-scale data management, cloud computing, and information visualization.

0101	Hector Corrada Bravo	Seats (Total: 234)	
	TuTh 3:30pm - 4:45pm	ESJ 0224	

CMSC330 **Organization of Programming Languages**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC250 and CMSC216. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in the Computer Science Minor program; or must be in Engineering: Computer program.

A study of programming languages, including their syntax, semantics, and implementation. Several different models of languages are discussed, including dynamic, scripting (e.g., Ruby, Python) functional (e.g., OCaml, Haskell, Scheme), and memory safe systems programming (e.g., Rust). Explores language features such as formal syntax, scoping and binding of variables, higher-order programming, typing, and type polymorphism. Introduces finite automata, context free grammar, parsing, lambda calculus, and basics of security attacks and software security.

0101	Michael Hicks	Seats (Total: 35)	
	TuTh 12:30pm - 1:45pm F 10:00am - 10:50am	CSI 1115 IRB 2207	Discussion

0102	Michael Hicks TuTh 12:30pm - 1:45pm F 4:00pm - 4:50pm	Seats (Total: 35) CSI 1115 IRB 2207	Discussion
0103	Michael Hicks TuTh 12:30pm - 1:45pm F 12:00pm - 12:50pm	Seats (Total: 35) CSI 1115 IRB 2207	Discussion
0104	Michael Hicks TuTh 12:30pm - 1:45pm F 1:00pm - 1:50pm	Seats (Total: 35) CSI 1115 IRB 2207	Discussion
0201	Roger Eastman TuTh 11:00am - 12:15pm F 2:00pm - 2:50pm	Seats (Total: 34) ESJ 0202 IRB 2207	Discussion
0202	Roger Eastman TuTh 11:00am - 12:15pm F 3:00pm - 3:50pm	Seats (Total: 34) ESJ 0202 IRB 2207	Discussion
0203	Roger Eastman TuTh 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 34) ESJ 0202 IRB 1207	Discussion
0204	Roger Eastman TuTh 11:00am - 12:15pm F 11:00am - 11:50am	Seats (Total: 34) ESJ 0202 IRB 1207	Discussion
0205	Roger Eastman TuTh 11:00am - 12:15pm F 2:00pm - 2:50pm	Seats (Total: 42) ESJ 0202 IRB 2107	Discussion
0206	Roger Eastman TuTh 11:00am - 12:15pm F 3:00pm - 3:50pm	Seats (Total: 42) ESJ 0202 IRB 2107	Discussion
0207	Roger Eastman TuTh 11:00am - 12:15pm F 4:00pm - 4:50pm	Seats (Total: 20) ESJ 0202 IRB 2107	Discussion

0208	Roger Eastman TuTh 11:00am - 12:15pm F 11:00am - 11:50am	Seats (Total: 38) ESJ 0202 IRB 2107	Discussion
0301	Anwar Mamat TuTh 2:00pm - 3:15pm F 12:00pm - 12:50pm	Seats (Total: 38) ESJ 0202 IRB 1207	Discussion
0302	Anwar Mamat TuTh 2:00pm - 3:15pm F 1:00pm - 1:50pm	Seats (Total: 38) ESJ 0202 IRB 1207	Discussion
0303	Anwar Mamat TuTh 2:00pm - 3:15pm F 2:00pm - 2:50pm	Seats (Total: 40) ESJ 0202 IRB 1207	Discussion
0304	Anwar Mamat TuTh 2:00pm - 3:15pm F 3:00pm - 3:50pm	Seats (Total: 40) ESJ 0202 IRB 1207	Discussion
0305	Anwar Mamat TuTh 2:00pm - 3:15pm F 10:00am - 10:50am	Seats (Total: 40) ESJ 0202 IRB 2107	Discussion
0306	Anwar Mamat TuTh 2:00pm - 3:15pm F 4:00pm - 4:50pm	Seats (Total: 21) ESJ 0202 IRB 2107	Discussion
0307	Anwar Mamat TuTh 2:00pm - 3:15pm F 12:00pm - 12:50pm	Seats (Total: 32) ESJ 0202 IRB 2107	Discussion
0308	Anwar Mamat TuTh 2:00pm - 3:15pm F 1:00pm - 1:50pm	Seats (Total: 32) ESJ 0202 IRB 2107	Discussion

CMSC351 **Algorithms**

(Perm req) Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC250 and CMSC216. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in Engineering: Computer program; or must be in the Computer Science Minor program. Credit only granted for: CMSC251 or CMSC351. Additional information: CMSC351 may not count as one of the required upper level CMSC courses for students who are required to have 24 upper level CMSC credits for graduation, i.e. for students who became computer science majors prior to Fall, 2002.

A systematic study of the complexity of some elementary algorithms related to sorting, graphs and trees, and combinatorics. Algorithms are analyzed using mathematical techniques to solve recurrences and summations.

0101	Clyde Kruskal MWF 10:00am - 10:50am	Seats (Total: 135) CSI 1115
0201	Mohammad Nayeem Teli MWF 12:00pm - 12:50pm	Seats (Total: 135) PHY 1410
0301	Mohammad Nayeem Teli MWF 1:00pm - 1:50pm	Seats (Total: 135) PHY 1410
0401	Clyde Kruskal MWF 2:00pm - 2:50pm	Seats (Total: 300) SKN 0200

CMSC351H **Algorithms**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC250 and CMSC216. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in Engineering: Computer program; or must be in the Computer Science Minor program. Credit only granted for: CMSC251 or CMSC351. Additional information: CMSC351 may not count as one of the required upper level CMSC courses for students who are required to have 24 upper level CMSC credits for graduation, i.e. for students who became computer science majors prior to Fall, 2002.

A systematic study of the complexity of some elementary algorithms related to sorting, graphs and trees, and combinatorics. Algorithms are analyzed using mathematical techniques to solve recurrences and summations.

0101	Mohammad Hajiaghayi TuTh 12:30pm - 1:45pm	Seats (Total: 36) CSI 2120

CMSC388D **Special Topics in Computer Science; 2D Game Engine Design**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216; and permission of CMNS-Computer Science department. This course will provide basic insight into the design process of a Javagame engine, 2D graphics, and the mathematics behind it. The primary focus of the course will be on 2D game engines but will discuss ideas relevant to 3D environments.

0101	David Mount	Seats (Total: 30)
	F 11:00am - 11:50am	CSI 2118

CMSC388E **Special Topics in Computer Science; Creative Approaches to Computing: Arts and Tech**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216; and permission of CMNS-Computer Science department. This class aims to bring the creativity back into computing by teaching basic art and design principles through the medium of coding. By bringing together Processing, a visual arts coding language, and different hallmarks of art theory, we want to teach an innovative class that empowers students to connect with their creative side. Students should come in wih basic coding knowledge but can expect to leave with a greater appreciation for digital media.

0101	Roger Eastman	Seats (Total: 34)
	F 2:00pm - 2:50pm	ESJ B0320

CMSC388F **Special Topics in Computer Science; Functional Pearls**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science.

Prerequisites: Minimum grade of C- in CMSC330. This course will explore elegant examples of functional programming. The first half will provide an introduction to Haskell and four important abstractions: monoids, functors, applicative functors, and monads. We will focus on simple and plentiful examples. The second half will cover a wide variety of functional programming techniques and applications.

0101	David Van Horn	Seats (Total: 30)
	F 10:00am - 10:50am	CSI 3120

CMSC388G **Special Topics in Computer Science; Virtual Reality Game Development**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science.

Prerequisites: Minimum grade of C- in CMSC216. Restriction: Permission of department. Explores the virtual reality game development best practices and use of commercial game engines to build VR experiences that are engaging, immersive, and reduce the onset of simulation sickness. Also, focuses on development with Unreal Engine using C++, using 3d models, lighting, and graphics to optimize experiences for VR.

0101	Ashok Agrawala	Seats (Total: 24)
	F 1:00pm - 1:50pm	CSI 2120

CMSC388I **Special Topics in Computer Science; WebAssembly OS**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science.

Prerequisites: Must have completed or be concurrently enrolled in CMSC216. Restriction: Permission of department. WebAssembly (wasm) is a new virtual machine designed by the four major browsers to run code almost as fast as native code. The goal is to add Operating System features to WebAssembly. To implement these features students will use AssemblyScript, a subset of Javascript which compiles to wasm.

0101	Michael Hicks	Seats (Total: 30)
	F 10:00am - 10:50am	CSI 2118

CMSC389C **Special Topics in Computer Science; Bitcoin and Other Cryptocurrencies**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: CMSC216 and CMSC250 with a grade of C- or better; and permission of the Computer Science Department. This course provides a comprehensive, practical introduction to the technology behind cryptocur rency and the economy surrounding it. This course will have a heavy emphasis on Bitcoin, but will dive into other types of cryptocurrency as well, such as Ethereum. This course is primarily intended to focus on the technological aspect of cryptocurrency, but we will also spend time discussing the economics of cryptocurrency.

0101	Jonathan Katz	Seats (Total: 30)
	F 12:00pm - 12:50pm	CSI 2118

CMSC389E **Special Topics in Computer Science; Digital Logic through Minecraft**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisite: Must have completed or be concurrently enrolled in (CMSC216 & CMSC250); or ENEE244; and permission of CMNS-Computer Science department." Explores the fundamentals of digital logic design using Minecraft's Redstone. Using the low-level and intuitive visualization ofcircuitry Redstone provides, you will create a series of projects thatapply principles of digital logic design learned in class.

0101	Jason Filippou	Seats (Total: 38)
	F 1:00pm - 1:50pm	CSI 3118

CMSC389J **Special Topics in Computer Science; Introduction to Reverse Engineering**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisite: Minimum of C- in CMSC216 The course will assist students in gaining experience in a high demand practice of cybersecurity through weekly reversing assignments. Students will be challenged to think outside the box in order to solve reversing challenges. Assignments will be challenges focused in the analysis of Linux binaries including various malware. The goal is to have students go from beginner to intermediate level reverse engineers. Students will be expected to have some assembly experience prior to the class (calling conventions, stack/heap, registers), but students will be taught x86_64 assembly as the semester progresses.

0101	Jonathan Katz	Seats (Total: 30)
	F 12:00pm - 12:50pm	CSI 3118

CMSC389K **Special Topics in Computer Science; Full-stack Web Development with Node.js**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216; and permissio n of CMNS-Computer Science department. This course provides a comprehens ive, practical introduction to modern full-stack web development using JavaScript and Node.js. The course will start with basic HTML/CSS/JavScr ipt. Then, we will move into Node.js and learn how to deploy a website from there. We will learn about Express.js (server-side development modu le) and MongoDB (database) in order to create a complete web application .

0101	John Dickerson F 11:00am - 11:50am	Seats (Total: 30) CSI 2120
0201	John Dickerson F 11:00am - 11:50am	Seats (Total: 30) CSI 3120

CMSC389N **Special Topics in Computer Science; Introduction to PHP & Javascript**

(Perm req)

Credits: 3 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisite: Minimum grade of C- in CMSC250 and CMSC216; and permission of CMNS-Computer Science department.

0101	Michael Hicks MWF 4:00pm - 4:50pm *Pre-requisite: C- or better in CMSC216 and CMSC250.*	Seats (Total: 130) CSI 1115

CMSC389O **Special Topics in Computer Science; The Coding Interview**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: CMSC216 and CMSC250 with a grade of C- or better; and permission of the Computer Science department. Students will be provided with a comprehensive, practical introduction to technical interviews. Starting with basic topics such as Big O and String Manipulation. We will then move into more complex topics such as Bit Manipulation and Dynamic Programming. Most of the classes will be "In-Class Interviews" and take-home assignments will simulate real interview settings.

0101	Thomas Goldstein F 11:00am - 11:50am	Seats (Total: 30) ESJ B0320
0201	Thomas Goldstein F 12:00pm - 12:50pm	Seats (Total: 30) ESJ 1309
0301	Thomas Goldstein F 12:00pm - 12:50pm	Seats (Total: 30) ESJ B0320

0401	Thomas Goldstein F 1:00pm - 1:50pm	Seats (Total: 30) ESJ 1309

CMSC389R **Special Topics in Computer Science; Introduction to Ethical Hacking**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: Minimum grade of C- in CMSC216; and 1 course with a minimum grade of C- from (CMSC250, ENEE150). Restriction: Permission of department. An introduction to ethical hacking geared towards entering the competitive world of cybersecurity Capture the Flag (CTF) competitions. Applications to a career in digital forensics, penetration testing, cryptology, and secure software development.

0101	David Levin F 1:00pm - 1:50pm	Seats (Total: 30) CSI 2118
0201	David Levin F 2:00pm - 2:50pm	Seats (Total: 30) CSI 2118

CMSC389U **Special Topics in Computer Science; Introduction to Developing AR Applications with HoloLens**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisite: CMSC216 and CMSC250 with a grade of C- or better. Restriction: Permission of department. An introduction to developing Augmented Reality applications for devices like the Microsoft HoloLens using the Microsoft Mixed-Reality Toolkit and the Unity 3D engine. Topics will include AR design thinking, the Unity scripting API, deploying applications to HoloLens, and the technology behind AR devices. Students will explore the capabilities of AR devices through bi-weekly projects designed to give them usable, valuable skills as quickly as possible. Basic programming and Unity experience strongly recommended

0101	Matthias Zwicker F 3:00pm - 3:50pm	Seats (Total: 18) CSI 1121

CMSC389W **Special Topics in Computer Science; STIC: Visualization Through Mathematica**

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: MATH140 and MATH141 (or equivalent). A comprehensive course on the technical computing language Mathematica, starting with basics including plotting, computation, 3D modeling, and interactive output. The last weeks focus on advanced topics including parallelization, evaluation control, precomputation, and advanced dynamic functionality. The course culminates in personalized final projects on a topic of each student's choice - application vary from physics to finance to nueroscience and more.

0101	William Goldman	Seats (Total: 35)
	F 4:00pm - 4:50pm	EGR 1104

CMSC390 **Honors Paper**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be admitted to the Computer Science Honors Program.

Special study or research directed toward preparation of honors paper.

Contact department for information to register for this course.

CMSC396H **Computer Science Honors Seminar**

(Perm req)

Credits: 1 Grading Method: Regular

Prerequisite: Must have admission into Computer Science Departmental Honors Program. Restriction: Permission of CMNS-Computer Science department. Credit only granted for: CMSC297 or CMSC396. Formerly: CMSC297.

Overview of computer science research activities, techniques, and tools. Diverse research areas will be covered, including systems, networks, artificial intelligence, human-computer interaction, software engineering, graphics, vision, and theory.

0101	David Levin	Seats (Total: 30)
	W 2:00pm - 2:50pm	IRB 2107

CMSC411 **Computer Systems Architecture**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department. Credit only granted for: ENEE446 or CMSC411.

Input/output processors and techniques. Intra-system communication, buses, caches. Addressing and memory hierarchies. Microprogramming, parallelism, and pipelining.

0101	Michelle Hugue TuTh 2:00pm - 3:15pm	Seats (Total: 87) CSI 2117	
0201	Michelle Hugue TuTh 3:30pm - 4:45pm	Seats (Total: 87) CSI 2117	
0301	Ilchul Yoon TuTh 11:00am - 12:15pm	Seats (Total: 45) CSI 1121	

CMSC412 **Operating Systems**

(Perm req)

Credits: 4 Grading Method: Regular CORE: CS

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; and 1 course with a minimum grade of C- from (CMSC414, CMSC417, CMSC420, CMSC430, CMSC433, CMSC435, ENEE440, ENEE457). Restriction: Permission of CMNS-Computer Science department; or must be in one of the following programs (Computer Science (Master's); Computer Science (Doctoral)). Credit only granted for: CMSC412 or ENEE447.

A hands-on introduction to operating systems, including topics in: multiprogramming, communication and synchronization, memory management, IO subsystems, and resource scheduling polices. The laboratory component consists of constructing a small kernel, including functions for device IO, multi-tasking, and memory management.

0101	Ashok Agrawala TuTh 11:00am - 12:15pm MW 12:00pm - 12:50pm	Seats (Total: 25) CSI 3117 CSI 1121	Discussion
0102	Ashok Agrawala TuTh 11:00am - 12:15pm MW 1:00pm - 1:50pm	Seats (Total: 22) CSI 3117 CSI 1121	Discussion
0103	Ashok Agrawala TuTh 11:00am - 12:15pm MW 11:00am - 11:50am	Seats (Total: 25) CSI 3117 CSI 2120	Discussion

CMSC414 **Computer and Network Security**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department. Credit only granted for: CMSC414, ENEE459C, or ENEE457.

An introduction to the topic of security in the context of computer systems and networks. Identify, analyze, and solve network-related security problems in computer systems. Fundamentals of number theory, authentication, and encryption technologies, as well as the practical problems that have to be solved in order to make those technologies workable in a networked environment, particularly in the wide-area Internet environment.

0101	David Levin, Michelle Mazurek TuTh 9:30am - 10:45am	Seats (Total: 87) CSI 2117
0201	Michelle Mazurek, David Levin TuTh 11:00am - 12:15pm	Seats (Total: 120) CSI 1115

CMSC417 **Computer Networks**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Computer networks and architectures. The OSI model including discussion and examples of various network layers. A general introduction to existing network protocols. Communication protocol specification, analysis, and testing.

0101	Michael Marsh TuTh 2:00pm - 3:15pm	Seats (Total: 140) CSI 1115

CMSC420 **Data Structures**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Description, properties, and storage allocation functions of data structures including balanced binary trees, B-Trees, hash tables, skiplists, tries, KD-Trees and Quadtrees. Algorithms for manipulating structures. Applications from areas such as String Processing, Computer Graphics, Information Retrieval, Computer Networks, Computer Vision, and Operating Systems.

0101	Jason Filippou TuTh 12:30pm - 1:45pm	Seats (Total: 238) ESJ 0224
0201	Michelle Hugue MW 3:30pm - 4:45pm	Seats (Total: 85) CSI 3117

CMSC421 **Introduction to Artificial Intelligence**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Introduces a range of ideas and methods in AI, varying semester to semester but chosen largely from: automated heuristic search, planning, games, knowledge representation, logical and statistical inference, learning, natural language processing, vision, robotics, cognitive modeling, and intelligent agents. Programming projects will help students obtain a hands-on feel for various topics.

0101	Donald Perlis MW 3:30pm - 4:45pm	Seats (Total: 115) ESJ 0224

CMSC422 **Introduction to Machine Learning**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC320, CMSC330, and CMSC351; and 1 course with a minimum grade of C- from (MATH240, MATH461); and permission of CMNS-Computer Science department.

Machine Learning studies representations and algorithms that allow machines to improve their performance on a task from experience. This is a broad overview of existing methods for machine learning and an introduction to adaptive systems in general. Emphasis is given to practical aspects of machine learning and data mining.

Credit only granted for CMSC422 or CMSC498M.

0101	Soheil Feizi TuTh 2:00pm - 3:15pm	Seats (Total: 85) CSI 3117
0201	James Reggia TuTh 12:30pm - 1:45pm	Seats (Total: 88) CSI 2117

CMSC423 **Bioinformatic Algorithms, Databases, and Tools**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

An introduction to the main algorithms, databases, and tools used in bioinformatics. Topics may include assembly and analysis of genome sequences, reconstructing evolutionary histories, predicting protein structure, and clustering of biological data. Use of scripting languages to perform analysis tasks on biological data. No prior knowledge of biology is assumed.

0101	Max Leiserson	Seats (Total: 88)
	TuTh 9:30am - 10:45am	ESJ 2204

CMSC424 **Database Design**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Students are introduced to database systems and motivates the database approach as a mechanism for modeling the real world. An in-depth coverage of the relational model, logical database design, query languages, and other database concepts including query optimization, concurrency control; transaction management, and log based crash recovery. Distributed and Web database architectures are also discussed.

0101	Daniel Abadi	Seats (Total: 95)
	MW 3:30pm - 4:45pm	IRB 1116

CMSC425 **Game Programming**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC420.

An introduction to the principles and practice of computer game programming and design. This includes an introduction to game hardware and systems, the principles of game design, object and terrain modeling, game physics, artificial intelligence for games, networking for games, rendering and animation, and aural rendering. Course topics are reinforced through the design and implementation of a working computer game.

0101	Roger Eastman	Seats (Total: 85)
	MW 2:00pm - 3:15pm	ESJ 1202

CMSC426 **Computer Vision**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department.

An introduction to basic concepts and techniques in computervision. This includes low-level operations such as image filtering and edge detection, 3D reconstruction of scenes using stereo and structure from motion, and object detection, recognition and classification.

0101	Mohammad Nayeem Teli, Cornelia Fermuller TuTh 11:00am - 12:15pm	Seats (Total: 45) CSI 1122

CMSC433 **Programming Language Technologies and Paradigms**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department.

Programming language technologies (e.g., object-oriented programming), their implementations and use in software design and implementation.

0101	Anwar Mamat TuTh 3:30pm - 4:45pm	Seats (Total: 155) ESJ 2208
0201	Michael Marsh TuTh 3:30pm - 4:45pm	Seats (Total: 38) IRB 2107

CMSC434 **Introduction to Human-Computer Interaction**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Assess usability by quantitative and qualitative methods. Conduct task analyses, usability tests, expert reviews, and continuing assessments of working products by interviews, surveys, and logging. Apply design processes and guidelines to develop professional quality user interfaces. Build low-fidelity paper mockups, and a high-fidelity prototype using contemporary tools such as graphic editors and a graphical programming environment (eg: Visual Basic, Java).

0101	Vibha Sazawal TuTh 12:30pm - 1:45pm	Seats (Total: 87) IRB 1116
0201	Evan Golub TuTh 12:30pm - 1:45pm	Seats (Total: 53) IRB 1207
0301	Evan Golub TuTh 2:00pm - 3:15pm	Seats (Total: 53) IRB 1207

CMSC435 **Software Engineering**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: 1 course with a minimum grade of C- from (CMSC412, CMSC417, CMSC420, CMSC430, CMSC433); and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

State-of-the-art techniques in software design and development. Laboratory experience in applying the techniques covered. Structured design, structured programming, top-down design and development, segmentation and modularization techniques, iterative enhancement, design and code inspection techniques, correctness, and chief-programmer teams. The development of a large software project.

0101	James Purtilo TuTh 12:30pm - 1:45pm	Seats (Total: 48) CSI 1121

CMSC436 **Programming Handheld Systems**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department.

Fundamental principles and concepts that underlie the programming of handheld systems, such as mobile phones, personal digital assistants, and tablet computers. Particular emphasis will be placed on concepts such as limited display size, power, memory and CPU speed; and new input modalities, where handheld systems differ substantially from non-handheld systems, and thus require special programming tools and approaches. Students will apply these concepts and principles in the context of an existing handset programming platform.

Course will be based on the iOS platform. Students must have access to a Macintosh computer to participate in this course.

0101	Peter Keleher	Seats (Total: 156)
	TuTh 11:00am - 12:15pm	ESJ 1224

CMSC451 **Design and Analysis of Computer Algorithms**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Fundamental techniques for designing efficient computer algorithms, proving their correctness, and analyzing their complexity. General topics include graph algorithms, basic algorithm design paradigms (such as greedy algorithms, divide-and-conquer, and dynamic programming), network flows, NP-completeness, and other selected topics in algorithms.

0101	Aravind Srinivasan	Seats (Total: 132)
	TuTh 11:00am - 12:15pm	ESJ 1202

CMSC452 **Elementary Theory of Computation**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Techniques are developed to determine the difficulty of a problem relative to a model of computation. Topics include Finite Automata, P, NP, decidability, undecidability, and communication complexity.

0101	William Gasarch	Seats (Total: 78)
	TuTh 12:30pm - 1:45pm	CSI 3117

CMSC456 **Cryptology**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: (CMSC106, CMSC131, or ENEE150; or equivalent programming experience); and (2 courses from (CMSC330, CMSC351, ENEE324, or ENEE380); or any one of these courses and a 400-level MATH course, or two 400-level MATH courses). Or permission of instructor. Also offered as: MATH456, ENEE456. Credit only granted for: MATH456, CMSC456, or ENEE456.

The theory, application, and implementation of mathematical techniques used to secure modern communications. Topics include symmetric and public-key encryption, message integrity, hash functions, block-cipher design and analysis, number theory, and digital signatures.

0101	Lawrence Washington TuTh 11:00am - 12:15pm	Seats (Total: 86) ATL 2324
0201	Jonathan Katz TuTh 2:00pm - 3:15pm	Seats (Total: 140) ESJ 2208
0301	Dana Dachman-Soled MW 2:00pm - 3:15pm	Seats (Total: 45) CSI 3117

CMSC457 **Introduction to Quantum Computing**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (MATH240, PHYS274); and 1 course with a minimum grade of C- from (CMSC351, PHYS373). Restriction: Permission of CMNS-Computer Science department. Additional information: No previous background in quantum mechanics is required.

An introduction to the concept of a quantum computer, including algorithms that outperform classical computation and methods for performing quantum computation reliably in the presence of noise. As this is a multidisciplinary subject, the course will cover basic concepts in theoretical computer science and physics in addition to introducing core quantum computing topics.

Also offered as PHYS457. Credit only granted for CMSC457 or PHYS457.

0101	Andrew Childs TuTh 12:30pm - 1:45pm	Seats (Total: 25) CSI 1122

CMSC460 **Computational Methods**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461); and 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (CMSC106, CMSC131); and minimum grade of C- in MATH246. Also offered as: AMSC460. Credit only granted for: AMSC460, AMSC466, CMSC460, or CMSC466.

Basic computational methods for interpolation, least squares, approximation, numerical quadrature, numerical solution of polynomial and transcendental equations, systems of linear equations and initial value problems for ordinary differential equations. Emphasis on methods and their computational properties rather than their analytic aspects. Intended primarily for students in the physical and engineering sciences.

0101	Akwum Onwunta MWF 1:00pm - 1:50pm	Seats (Total: 30) MTH 0305
0201	Juan Pablo Borthagaray TuTh 9:30am - 10:45am	Seats (Total: 34) PHY 0405
0401	Heyrim Cho TuTh 12:30pm - 1:45pm	Seats (Total: 25) MTH 1311

CMSC466 **Introduction to Numerical Analysis I**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461); and 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (CMSC106, CMSC131); and minimum grade of C- in MATH410. Also offered as: AMSC466. Credit only granted for: AMSC460, AMSC466, CMSC460, or CMSC466.

Floating point computations, direct methods for linear systems, interpolation, solution of nonlinear equations.

0101	Pierre-Emmanuel Jabin TuTh 9:30am - 10:45am	Seats (Total: 25) BPS 1234

CMSC470 **Introduction to Natural Language Processing**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC320, CMSC330, and CMSC351; and 1 course with a minimum grade of C- from (MATH240, MATH461). Restriction: Permission of CMNS-Computer Science department.

Introduction to fundamental techniques for automatically processing and generating natural language with computers. Machine learning techniques, models, and algorithms that enable computers to deal with the ambiguity and implicit structure of natural language. Application of these techniques in a series of assignments designed to address a core application such as question answering or machine translation.

0101	Jordan Boyd-Graber Ying	Seats (Total: 50)
	MW 5:00pm - 6:15pm	IRB 2207

CMSC474 **Introduction to Computational Game Theory**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Credit only granted for: CMSC474, ECON414, GVPT390 or GVPT399A.

Game theory deals with interactions among agents (either human or computerized) whose objectives and preferences may differ from the objectives and preferences of the other agents. It will also provide a comprehensive introduction to game theory, concentrating on its computational aspects.

0101	Mohammad Hajiaghayi	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	CSI 3118

CMSC475 **Combinatorics and Graph Theory**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: MATH240 and MATH241; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Also offered as: MATH475.

General enumeration methods, difference equations, generating functions. Elements of graph theory, matrix representations of graphs, applications of graph theory to transport networks, matching theory and graphical algorithms.

0101	Roohollah Ebrahimian	Seats (Total: 32)
	MWF 10:00am - 10:50am	MTH 0303

CMSC498A **Selected Topics in Computer Science**

(Perm req)

Credits: 1-3 Grading Method: Regular

An individualized course designed to allow a student or students to pursue a selected topic not taught as a part of the regular course offerings under the supervision of a Computer Science faculty member. In addition, courses dealing with topics of special interest and/or new emerging areas of computer science will be offered with this number. Selected topics courses will be structured very much like a regular course with homework, project and exams. Credit according to work completed

Contact department for information to register for this course.

CMSC498L **Selected Topics in Computer Science; Introduction to Deep Learning**

(Perm req)

Credits: 3 Grading Method: Regular

An individualized course designed to allow a student or students to pursue a selected topic not taught as a part of the regular course offerings under the supervision of a Computer Science faculty member. In addition, courses dealing with topics of special interest and/or new emerging areas of computer science will be offered with this number. Selected topics courses will be structured very much like a regular course with homework, project and exams. Credit according to work completed

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; and 1 course with a minimum grade of C- from (MATH240, MATH461); and permission of CMNS-Computer Science department. Or must be in (Computer Science (Doctoral), ComputerScience (Master's) program.

0101	Abhinav Shrivastava	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm	CSI 1121

CMSC498O **Selected Topics in Computer Science; Introduction to Data Visualization**

(Perm req)

Credits: 3 Grading Method: Regular

An individualized course designed to allow a student or students to pursue a selected topic not taught as a part of the regular course offerings under the supervision of a Computer Science faculty member. In addition, courses dealing with topics of special interest and/or new emerging areas of computer science will be offered with this number. Selected topics courses will be structured very much like a regular course with homework, project and exams. Credit according to work completed

Prerequisite: Minimum gra de of C- in CMSC330 and CMSC351; and permission of CMNS-Computer Science department. Or must be in Computer Science (Doctoral), Computer Scienc e (Master's) program.

0101	Leilani Battle	Seats (Total: 27)
	TuTh 12:30pm - 1:45pm	IRB 2207

CMSC498Q **Selected Topics in Computer Science; Algorithms for Geospatial Computing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An individualized course designed to allow a student or students to pursue a selected topic not taught as a part of the regular course offerings under the supervision of a Computer Science faculty member. In addition, courses dealing with topics of special interest and/or new emerging areas of computer science will be offered with this number. Selected topics courses will be structured very much like a regular course with homework, project and exams. Credit according to work completed

Prerequisite: Minimum of C- in CMSC330 and CMSC351. Also offered as GEOG498I. Credit only granted for GEOG498I or CMSC498Q. Geometric primitives and algorithms for discrete and continuous spatial data processing. Point data representation and analysis: spatial data structures, neighbor finding and range queries, clustering algorithms. Terrain modeling: grids and TINs, algorithms and data structures for building and querying TINs, gridding and interpolation. Terrain analysis: segmentation through watershed computation, algorithms for visibility comp utation. Applications to LiDAR data processing and analysis for forest management, urban modeling, and coastal data mapping.

0101	Leila DeFloriani	Seats (Total: 24)
	TuTh 11:00am - 12:15pm	LEF 1171

CMSC499A **Independent Undergraduate Research**

(Perm req)

Credits: 1-3 Grading Method: Regular

Students are provided with an opportunity to participate in a computer science research project under the guidance of a faculty advisor. Format varies. Students and supervising faculty member will agree to a research plan which must be approved by the department. As part of each research plan, students should produce a final paper delineating their contribution to the field.

Contact department for information to register for this course.

CMSC631 **Program Analysis and Understanding**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CMSC330; or students who have taken courses with comparable content may contact the department; or permission of instructor.

Techniques for static analysis of source code and modern programming paradigms. Analysis techniques: data flow analysis, program dependence graphs, program slicing, abstract interpretation. The meaning of programs: denotational semantics, partial evaluation. Advanced treatment of abstraction mechanisms: polymorphic types, operation overloading, inheritance, object-oriented programming and ML-like programming languages.

0101	Robert Rand	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	IRB 2207

CMSC642 **Big Data Systems**

Credits: 3 Grading Method: Regular

Restriction: Must be in the Data Science Post-Baccalaureate Certificate of Professional Studies program; and permission of CMNS-Computer Science department.

An overview of data management systems for performing data science on large volumes of data, including relational databases, and NoSQL systems. The topics covered include: different types of data management systems, their pros and cons, how and when to use those systems, and best practices for data modeling.

PCD1	Prem Saggar	Seats (Total: 20)
	Tu 7:00pm - 9:30pm	CSI 2120
	Restricted to students in the Graduate Certificate in Professional Studies in Data Science.	

CMSC644 Algorithms for Data Science

Credits: 3 Grading Method: Regular

Restriction: Must be in the Data Science Post-Baccalaureate Certificate of Professional Studies program; and permission of CMNS-Computer Science department.

Provides an in-depth understanding of some of the key data structures and algorithms essential for advanced data science. Topics include random sampling, graph algorithms, network science, data streams, and optimization.

PCD1	Hector Corrada Bravo, Samir Khuller	Seats (Total: 20)
	W 7:00pm - 9:30pm	CSI 3120
	Restricted to students in the Graduate Certificate in Professional Studies in Data Science.	

CMSC661 Scientific Computing II

Credits: 3 Grading Method: Regular

Prerequisite: Must have knowledge of C or Fortran. And CMSC466, AMSC466, AMSC460, or CMSC460; or (must have knowledge of basic numerical analysis (linear equations, nonlinear equations, integration, interpolation); and permission of instructor). Also offered as: AMSC661. Credit only granted for: AMSC661 or CMSC661.

Fourier and wavelet transform methods, numerical methods for elliptic partial differential equations, numerical linear algebra for sparse matrices, Finite element methods, numerical methods for time dependent partial differential equations. Techniques for scientific computation with an introduction to the theory and software for each topic. Course is part of a two course sequence (660 and 661), but can be taken independently.

0101	Lise-Marie Imbert-Gerard	Seats (Total: 27)
	TuTh 9:30am - 10:45am	MTH B0423

CMSC664 **Advanced Scientific Computing II**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CMSC663. Restriction: Permission of instructor. Also offered as: AMSC664. Credit only granted for: AMSC664, or CMSC664.

In the sequence CMSC 663, CMSC 664 students work on a year-long individual project to develop software for a scientific task in a high performance computing environment. Lectures will be given on code development and validation, parallel algorithms for partial differential equations, nonlinear systems, optimization.

0101	Thomas Goldstein, Jacob Bedrossian	Seats (Total: 18)
	MWF 1:30pm - 2:20pm	MTH B0431

CMSC701 **Computational Genomics**

Credits: 3 Grading Method: Regular, Audit

An introduction to the algorithms and heuristics used in the analysis o biological sequences. Includes an introduction to string matching and alignment algorithms, phylogenetic analysis, string reconstruction (genome assembly), and sequence pattern recognition (gene and motif finding). A particular emphasis will be placed on the design of efficient algorithms and on techniques for analyzing the time and space complexity of these algorithms. Computational concepts will be presented in the context of current biological applications. No prior knowledge of biology necessary.

0101	Mihai Pop	Seats (Total: 30)
	TuTh 9:30am - 10:45am	IRB 2107

CMSC712 **Distributed Algorithms and Verification**

Credits: 3 Grading Method: Regular, Audit

Study of algorithms from the distributed and concurrent systems literature. Formal approach to specifying, verifying, and deriving such algorithms. Areas selected from mutual exclusion, resource allocation, quiescence detection, election, Byzantine agreements, routing, network protocols, and fault-tolerence. Formal approaches will handle system specification and verification of safety, liveness, and real-time properties.

0101	A.U. Shankar	Seats (Total: 30)
	TuTh 9:30am - 10:45am	CSI 3120

CMSC722 **Artificial Intelligence Planning**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: CMSC421; or students who have taken courses with comparable content may contact the department; or permission of CMNS-Computer Science department.

Automated planning of actions to accomplish some desired goals. Basic algorithms, important systems, and new directions in the field of artificial intelligence planning systems.

0101	Dana Nau	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	IRB 2107

CMSC733 **Computer Processing of Pictorial Information**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: CMSC420.

Input, output, and storage of pictorial information. Pictures as information sources, efficient encoding, sampling, quantization, approximation. Position-invariant operations on pictures, digital and optical implementations, the pax language, applications to matched and spatial frequency filtering. Picture quality, image enhancement and image restoration. Picture properties and pictorial pattern recognition. Processing of complex pictures; figure extraction, properties of figures. Data structures for pictures description and manipulation; picture languages. Graphics systems for alphanumeric and other symbols, line drawings of two- and three-dimensional objects, cartoons and movies.

0101	John Aloimonos	Seats (Total: 60)
	TuTh 11:00am - 12:15pm	PHY 1201

CMSC740 **Advanced Computer Graphics**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: MATH240 and CMSC420; or permission of instructor.

An introduction to the principles of computer graphics. Includes an introduction to graphics displays and systems, introduction to the mathematics of affine and projective transformations, perspective, curve and surface modeling, algorithms for hidden-surface removal, color models, methods for modeling illumination, shading, and reflection.

0101	Matthias Zwicker	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	IRB 2207

CMSC764 **Advanced Numerical Optimization**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH410; or permission of instructor. Also offered as: AMSC607. Credit only granted for: AMSC607 or CMSC764. Formerly: CMSC878O.

Modern numerical methods for solving uncontrained and constrained nonlinear optimization problems in finite dimensions. Design of computational algorithms and the analysis of their properties.

0101	Thomas Goldstein	Seats (Total: 54)
	TuTh 11:00am - 12:15pm	IRB 2207

CMSC798 **Graduate Seminar in Computer Science**

(Perm req)

Credits: 1-3 Grading Method: Regular

Contact department for information to register for this course.

CMSC798F **Graduate Seminar in Computer Science; How to Conduct Great Research**

Credits: 1 Grading Method: Regular, Audit

0101	Ramani Duraiswami	Seats (Total: 58)
	F 11:00am - 11:50am	CSI 3117

CMSC799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

CMSC818N **Advanced Topics in Computer Systems; Robotics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of computer systems to suit the interest and background of students.

0101	Dinesh Manocha	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	IRB 2107

CMSC818W **Advanced Topics in Computer Systems; Wireless and Mobile Systems for the IoT**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of computer systems to suit the interest and background of students.

0101	Nirupam Roy	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	CSI 2118

CMSC828F **Advanced Topics in Information Processing; Computational Psycholinguistics**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

Also offered as LING849C and NACS728W. Credit granted for CMSC828F, LING849C or NACS728W.

0101	Naomi Feldman	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	MMH 1108B

CMSC828U **Advanced Topics in Information Processing; Algorithms in Machine Learning: Guarantees and Analyses**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

0101	Furong Huang	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	IRB 1116

CMSC828X **Advanced Topics in Information Processing; Algorithms for Probabilistic and Deterministic Graphical Models**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

0101	Rina Dechter	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	CSI 3120

CMSC838J **Advanced Topics in Programming Languages; Interactive Technologies in Human-Computer Interaction**

Credits: 3

Grading Method: Regular, Audit

Advanced topics selected by faculty from the literature of programming languages to suit the interest and background of students.

This is a graduate-level, research-oriented course that covers broad areas of interactive technology and HCI topics. The course combines reading, small labs, term project, and tests. Topics include ubiquitous and mobile computing, wearables, natural user interfaces, tangible UIs, interactive fabrication, and more. Through the course, you will have a better understanding of the technology behind each of the topic, learn rapid prototyping skills (including modeling, simple electronics, and fabrication) and build interactive gadgets.

0101	Huaishu Peng	Seats (Total: 30)
	TuTh 9:30am - 10:45am	IRB 1207

CMSC858M **Advanced Topics in Theory of Computing; Algorithmic Lower Bounds: Fun with Hardness Proofs**

Credits: 3

Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of theory of computing to suit the interest and background of students.

0101	Mohammad Hajiaghayi	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	CSI 3118

CMSC898 **Pre-Candidacy Research**

Credits: 1-8

Grading Method: Regular, Sat-Fail

Advanced topics selected by the faculty from the literature of applications of computer science to suit the interest and background of students.

Contact department for information to register for this course.

CMSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

COMM Communication Spring 2019

COMM107 **Oral Communication: Principles and Practices**

Credits: 3 | Grading Method: Regular, Pass-Fail | General Education: FSOC

Credit only granted for: COMM107, COMM200, ENES143, INAG110, JOUR130 or THET285.

A study of and practice in oral communication, including principles of interviewing, group discussion, listening, informative briefings, and persuasive speeches.

0101	Yumin Yan MWF 8:00am - 8:50am	Seats (Total: 19) SKN 0104
0201	Shoaa Almalki MWF 8:00am - 8:50am	Seats (Total: 19) SKN 1112
0301	Jim Golden MWF 8:00am - 8:50am	Seats (Total: 19) SKN 1115
0401	Tamanika Ferguson MWF 8:00am - 8:50am	Seats (Total: 19) PLS 1176
1101	Yumin Yan MWF 9:00am - 9:50am	Seats (Total: 19) SKN 0104
1201	Shoaa Almalki MWF 9:00am - 9:50am	Seats (Total: 19) SKN 1112
1301	Jim Golden MWF 9:00am - 9:50am	Seats (Total: 19) SKN 1115
1401	Tamanika Ferguson MWF 9:00am - 9:50am	Seats (Total: 19) PLS 1176
2001	Allison Chatham MWF 9:00am - 9:50am	Seats (Total: 19) KEY 0119
2301	Rebecca Alt MWF 10:00am - 10:50am	Seats (Total: 19) SKN 0104
2401	Allison Chatham MWF 10:00am - 10:50am	Seats (Total: 19) SKN 1112
2501	Daniel Foster MWF 10:00am - 10:50am	Seats (Total: 19) SKN 1115

2601	Anne Smithson MWF 10:00am - 10:50am	Seats (Total: 19) PLS 1176
2701	David Payne MWF 10:00am - 10:50am	Seats (Total: 19) PLS 1180
2801	Tamanika Ferguson MWF 10:00am - 10:50am	Seats (Total: 19) PLS 1162
2901	Kisha Dasent MWF 10:00am - 10:50am	Seats (Total: 19) KEY 0119
3201	Jose Gomez Garcia MWF 10:00am - 10:50am	Seats (Total: 19) PLS 1184
3301	Rebecca Alt MWF 11:00am - 11:50am	Seats (Total: 19) SKN 0104
3401	Allison Chatham MWF 11:00am - 11:50am	Seats (Total: 19) SKN 1112
3501	Daniel Foster MWF 11:00am - 11:50am	Seats (Total: 19) SKN 1115
3601	Anne Smithson MWF 11:00am - 11:50am	Seats (Total: 19) PLS 1176
3701	David Payne MWF 11:00am - 11:50am	Seats (Total: 19) PLS 1180
3801	Kisha Dasent MWF 11:00am - 11:50am	Seats (Total: 19) PLS 1162
3901	Jeannette Viens MWF 11:00am - 11:50am	Seats (Total: 19) PLS 1168
4101	Jose Gomez Garcia MWF 11:00am - 11:50am	Seats (Total: 19) PLS 1184
4301	Kisha Dasent MWF 1:00pm - 1:50pm	Seats (Total: 19) SKN 1112

4401	Daniel Foster MWF 1:00pm - 1:50pm	Seats (Total: 19) PLS 1176
4501	Jim Golden MWF 1:00pm - 1:50pm	Seats (Total: 19) PLS 1168
4601	David Payne MWF 1:00pm - 1:50pm	Seats (Total: 19) WDS 1131
4701	Anne Smithson MWF 1:00pm - 1:50pm	Seats (Total: 19) PLS 1172
4801	Janna Soeder MWF 1:00pm - 1:50pm	Seats (Total: 19) ARC 1123
4901	Savreen Hundal MWF 2:00pm - 2:50pm	Seats (Total: 19) SKN 1112
5001	Daniel Foster MWF 2:00pm - 2:50pm	Seats (Total: 19) PLS 1176
5101	Jim Golden MWF 2:00pm - 2:50pm	Seats (Total: 19) PLS 1168
5201	David Payne MWF 2:00pm - 2:50pm	Seats (Total: 19) WDS 1131
5301	Rebecca Alt MWF 2:00pm - 2:50pm	Seats (Total: 19) PLS 1172
5401	Anne Smithson MWF 2:00pm - 2:50pm	Seats (Total: 19) PLS 1158
5601	Sarah Vick MW 2:00pm - 3:15pm	Seats (Total: 19) CHE 2116
5701	Gareth Williams MW 2:00pm - 3:15pm	Seats (Total: 19) PLS 1180

5801	Alyson Farzad MW 2:00pm - 3:15pm	Seats (Total: 19) PLS 1184
	This section is designed for students committed to community engagement and social change. Guided by a model of service learning, students will work alongside the Do Good Institute to enact change in their communities.	
5901	Darrian Carroll MW 2:00pm - 3:15pm	Seats (Total: 19) PHY 4222
6001	Shawna Dias MW 2:00pm - 3:15pm	Seats (Total: 19) WDS 1127
6101	Sarah Vick MW 3:30pm - 4:45pm	Seats (Total: 19) CHE 2116
6201	Yiwen Dai MW 3:30pm - 4:45pm	Seats (Total: 19) PLS 1180
6301	Alyson Farzad MW 3:30pm - 4:45pm	Seats (Total: 19) PLS 1184
	This section is designed for students committed to community engagement and social change. Guided by a model of service learning, students will work alongside the Do Good Institute to enact change in their communities.	
6401	Hagar Attia MW 3:30pm - 4:45pm	Seats (Total: 19) PHY 4222
6501	Gerry Strumpf MW 3:30pm - 4:45pm	Seats (Total: 19) KEY 0119
6701	Tori Mends-Cole MW 5:00pm - 6:15pm	Seats (Total: 19) SKN 1112
6801	Janna Soeder MW 5:00pm - 6:15pm	Seats (Total: 19) SKN 1115
6901	Yiwen Dai MW 5:00pm - 6:15pm	Seats (Total: 19) PLS 1176
7001	Paula Nadler MW 5:00pm - 6:15pm	Seats (Total: 19) KEY 1117

7101	Janna Soeder MW 6:30pm - 7:45pm	Seats (Total: 19) KEY 0124
7201	Tori Mends-Cole MW 6:30pm - 7:45pm	Seats (Total: 19) SKN 1112
7301	Junhan Chen TuTh 8:00am - 9:15am	Seats (Total: 19) PLS 1176
7401	Shawna Dias TuTh 8:00am - 9:15am	Seats (Total: 19) PLS 1180
7501	Karen Lamb TuTh 8:00am - 9:15am	Seats (Total: 19) PLS 1184
7601	Jim Golden TuTh 8:00am - 9:15am	Seats (Total: 19) PLS 1158
8101	Junhan Chen TuTh 9:30am - 10:45am	Seats (Total: 19) PLS 1176
8201	Shawna Dias TuTh 9:30am - 10:45am	Seats (Total: 19) PLS 1180
8301	Karen Lamb TuTh 9:30am - 10:45am	Seats (Total: 19) PLS 1184
8401	Thomas McCloskey TuTh 9:30am - 10:45am	Seats (Total: 19) PLS 1158
8501	Jeannette Viens TuTh 9:30am - 10:45am	Seats (Total: 19) PLS 1162
8701	Cassondra Pope TuTh 9:30am - 10:45am	Seats (Total: 19) WDS 1127
8901	Melissa Lucas TuTh 11:00am - 12:15pm	Seats (Total: 19) PLS 1176
	This section is designed for current or prospective Business Majors.	

9001	Brooke Fowler TuTh 11:00am - 12:15pm	Seats (Total: 19) PLS 1180
9101	Matthew Salzano TuTh 11:00am - 12:15pm	Seats (Total: 19) PLS 1117
9201	Duli Shi TuTh 11:00am - 12:15pm	Seats (Total: 19) JMZ 0125
9301	Meridith Styer TuTh 11:00am - 12:15pm	Seats (Total: 19) PLS 1184
9401	Naette Lee TuTh 11:00am - 12:15pm	Seats (Total: 19) WDS 1127
9501	Cassondra Pope TuTh 11:00am - 12:15pm	Seats (Total: 19) WDS 1131
9601	Raphael Mazzone Tu 12:30pm - 1:45pm Th 12:30pm - 1:45pm	Seats (Total: 19) PLS 1176 ONLINE
9701	Brooke Fowler TuTh 12:30pm - 1:45pm	Seats (Total: 19) PLS 1180
9801	Matthew Salzano TuTh 12:30pm - 1:45pm	Seats (Total: 19) PLS 1117
9901	Duli Shi TuTh 12:30pm - 1:45pm	Seats (Total: 19) JMZ 2125
9902	Skye De Saint Felix TuTh 12:30pm - 1:45pm	Seats (Total: 19) PLS 1184
9903	Karen Lamb TuTh 12:30pm - 1:45pm	Seats (Total: 19) WDS 1127
9904	Jade Olson TuTh 12:30pm - 1:45pm	Seats (Total: 19) WDS 1131

9905	Hagar Attia TuTh 2:00pm - 3:15pm	Seats (Total: 19) SKN 0104
9906	Raphael Mazzone TuTh 2:00pm - 3:15pm	Seats (Total: 19) PLS 1180
9907	Cassondra Pope TuTh 2:00pm - 3:15pm	Seats (Total: 19) PLS 1184
	This section is designed for current or prospective STEM students.	
9908	Jeannette Viens TuTh 2:00pm - 3:15pm	Seats (Total: 19) JMZ 1103
9909	Karen Lamb TuTh 2:00pm - 3:15pm	Seats (Total: 19) KEY 0119
9910	Alex Thomas TuTh 2:00pm - 3:15pm	Seats (Total: 19) PLS 1168
9911	Hagar Attia TuTh 3:30pm - 4:45pm	Seats (Total: 19) SKN 0104
9912	Christopher Swift TuTh 3:30pm - 4:45pm	Seats (Total: 19) PLS 1180
9913	Cassondra Pope TuTh 3:30pm - 4:45pm	Seats (Total: 19) PLS 1184
	This section is designed for current or prospective STEM students	
9914	Raphael Mazzone TuTh 3:30pm - 4:45pm	Seats (Total: 19) JMZ 2123
9915	Ashley Lewis TuTh 3:30pm - 4:45pm	Seats (Total: 19) KNI 1105
9916	Meridith Styer TuTh 3:30pm - 4:45pm	Seats (Total: 19) PLS 1168
9917	Meridith Styer TuTh 5:00pm - 6:15pm	Seats (Total: 19) PLS 1168

9918	Christopher Swift TuTh 5:00pm - 6:15pm	Seats (Total: 19) PLS 1180
9920	L Gordon TuTh 5:00pm - 6:15pm	Seats (Total: 19) PLS 1176
9923	L Gordon TuTh 6:30pm - 7:45pm	Seats (Total: 19) PLS 1176
9926	Julie Gowin TuTh 5:00pm - 6:15pm	Seats (Total: 19) KEY 0120

COMM200 **Critical Thinking and Speaking**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: FSOC

Credit only granted for: COMM107, COMM200, ENES143, INAG110, JOUR130, OR THET285.

Theory and practice of persuasive discourse analysis and composition. Research techniques, logical and rhetorical conceptions of argument, and technical principles for persuading in public venues.

0101	Christopher Swift TuTh 12:30pm - 1:45pm	Seats (Total: 19) WDS 1130
0201	Christopher Swift TuTh 2:00pm - 3:15pm	Seats (Total: 19) WDS 1130
0301	Randall Fowler MWF 11:00am - 11:50am	Seats (Total: 19) PLS 1115
0401	Randall Fowler MWF 10:00am - 10:50am	Seats (Total: 19) PLS 1115

COMM201 **Introduction to Public Relations**

Credits: 3 Grading Method: Regular

Basic concepts and principles of public relations. Roles in organizations and society; history; skills and practices of public relations; theories and models of effective and ethical public relations.

Restriction: Must be in Communication program.

0101	Sahar Khamis TuTh 11:00am - 12:15pm	Seats (Total: 35) TYD 1118	

COMM230 **Argumentation and Debate**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A study of the fundamental principles of reasoning, analysis, and evidence preparation of debate briefs and presentation of standard academic debate.

0101	Darrian Carroll TuTh 8:00am - 9:15am	Seats (Total: 24) PLS 1115	
0201	Victoria Ledford TuTh 12:30pm - 1:45pm	Seats (Total: 24) JMZ 1124	
0301	Victoria Ledford TuTh 11:00am - 12:15pm	Seats (Total: 24) SKN 1112	
0401	Darrian Carroll TuTh 9:30am - 10:45am	Seats (Total: 24) PLS 1115	

COMM250 **Introduction to Communication Inquiry**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introduction to the field of communication. Definitions, models, and contexts of communication; rhetorical theory and rhetorical criticism of discourse.

This is a blended learning course.

0101	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 23) SKN 0200 ONLINE SQH 2120	Discussion
0102	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 23) SKN 0200 ONLINE SQH 2120	Discussion

0103	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 23) SKN 0200 ONLINE SQH 2120	Discussion
0104	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 23) SKN 0200 ONLINE SQH 1111	Discussion
0105	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 23) SKN 0200 ONLINE SQH 1107	Discussion
0106	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 23) SKN 0200 ONLINE SQH 1105	Discussion
0107	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 23) SKN 0200 ONLINE SQH 1101	Discussion
0108	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 23) SKN 0200 ONLINE SQH 1101	Discussion
0109	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 23) SKN 0200 ONLINE SQH 1101	Discussion

COMM269B **Special Topics in Study Abroad II; Oral Communication for Leaders in the Business World**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

COMM269C **Special Topics in Study Abroad II; Designing Communicatoin Campaigns**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

COMM269E **Special Topics in Study Abroad II; Social Media: An Italian Perspective**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

COMM269F **Special Topics in Study Abroad II; Social Media, Social Food**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

COMM269M **Special Topics in Study Abroad II; Media Technology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

COMM269P **Special Topics in Study Abroad II; Principles of Film and Media Production**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

COMM269V **Special Topics in Study Abroad II; Visual Communication: Intercultural Photography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

COMM288 **Communication Internship**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

An individual experience arranged by the student with the instructor. Does not satisfy communication major requirements. 45 hours of supervised internship per credit hour with communication professional. Not a substitute for COMM386.

0101	Julie Gowin Contact instructor or department for details.	Seats (Total: 20)
0601	Leah Waks Contact instructor or department for details.	Seats (Total: 20)

COMM324 **Communication and Gender**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DSHU, DVUP

The creation of images of male and female, and masculine and feminine, through communication, the differences in male and female communication behaviors and styles, and the implications of those images and styles for male-female transactions.

0101	Skye De Saint Felix TuTh 8:00am - 9:15am	Seats (Total: 35) SKN 1115
0201	Skye De Saint Felix TuTh 9:30am - 10:45am	Seats (Total: 35) ASY 3211
0301	Kimberley Hannah-Prater MW 3:30pm - 4:45pm	Seats (Total: 35) SKN 1115
0401	Kimberley Hannah-Prater MW 5:00pm - 6:15pm	Seats (Total: 35) KEY 0102
SG91	Trevor Parry-Giles M 5:00pm - 7:30pm *Restricted to COMM students at Shady Grove.*	Seats (Total: 35) Location: TBA

COMM330 **Argumentation and Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contemporary theories of argumentation with special emphasis on methods of formulating and critiquing public policy argument.

0101	Meridith Styer TuTh 12:30pm - 1:45pm	Seats (Total: 35) SKN 0104	

COMM331 **News Writing and Reporting for Public Relations**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM201; and must have completed or be concurrently enrolled in JOUR181. Restriction: Must be in Communication program; and (sophomore standing; or junior standing). Or permission of ARHU-Communication department. Credit only granted for: JOUR201, COMM231, or COMM331. Formerly: COMM231.

Writing and researching news and information media for public relations; laboratory in news-gathering tools and writing techniques for public relations.

0101	Vijaya Bohlmann M 10:00am - 11:50am W 10:00am - 11:50am	Seats (Total: 18) PLS 1129 PLS 1129	 Lab
0201	Gareth Williams M 12:00pm - 1:50pm W 12:00pm - 1:50pm	Seats (Total: 18) PLS 1129 PLS 1129	 Lab
0301	Vijaya Bohlmann M 8:00am - 9:50am W 8:00am - 9:50am	Seats (Total: 18) PLS 1129 PLS 1129	 Lab
0401	Susan Simon Tu 3:30pm - 5:20pm Th 3:30pm - 5:20pm	Seats (Total: 18) PLS 1129 PLS 1129	 Lab

COMM332 **News Editing for Public Relations**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in COMM331; or students who have taken courses with comparable content may contact the department. And permission of ARHU-Communication department. Restriction: Must be in Communication program. Credit only granted for: JOUR202, COMM232, or COMM332. Formerly: COMM232.

Copy editing, graphic principles and processes, news and information technologies for public relations.

0101	Mollie Kaufer Tu 12:30pm - 1:45pm Th 12:30pm - 1:45pm	Seats (Total: 18) PLS 1129 PLS 1129	 Lab

COMM351 **Public Relations Techniques**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM332. Restriction: Must be in Communication program. Credit only granted for: COMM351 or JOUR331. Formerly: JOUR331.

The techniques of public relations, including news releases, publications and printed materials, audio-visual techniques, speeches and special events. Application of these techniques in laboratory and field projects.

0101	Sarah Aghazadeh M 5:00pm - 6:15pm W 5:00pm - 6:15pm	Seats (Total: 18) ATL 1410 ATL 1410	 Lab
0201	Sarah Aghazadeh M 3:30pm - 4:45pm W 3:30pm - 4:45pm	Seats (Total: 18) ATL 1410 ATL 1410	 Lab

COMM353 **New Media Writing for Public Relations**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in COMM351. Restriction: Must be in Communication program. Credit only granted for: COMM352 or COMM353. Formerly: COMM352.

Students learn the uses and influence of new media on public relations practice and expand their ability to write using new and traditional media platforms and tools

0101	Luke Capizzo Tu 8:00am - 9:15am Th 8:00am - 9:15am	Seats (Total: 18) ATL 1410 ATL 1410	 Lab
0201	Sumin Fang Tu 11:00am - 12:15pm Th 11:00am - 12:15pm	Seats (Total: 18) ATL 1410 ATL 1410	 Lab

0301	Luke Capizzo Tu 9:30am - 10:45am Th 9:30am - 10:45am	Seats (Total: 18) ATL 1410 ATL 1410	 Lab
0401	Sumin Fang Tu 9:30am - 10:45am Th 9:30am - 10:45am	Seats (Total: 18) PLS 1129 PLS 1129	 Lab

COMM360 **The Rhetoric of Black America**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

An historical-critical survey of the rhetoric of Black Americans from the colonial period to the present.

0101	Naette Lee TuTh 9:30am - 10:45am	Seats (Total: 35) HBK 0105

COMM370 **Mediated Communication**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM250. Restriction: Junior standing or higher.

Analysis and critique of structure, performance, content, effects, and future of mediated communication.

Contact department for information to register for this course.

COMM371 **Communication and Digital Media**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Communication program. Credit only granted for: COMM371 or COMM398V. Formerly: COMM398V.

A basic introduction to communication in the digital age. Through class lectures, assignments and projects, students will learn to effectively use new media for the purpose of strategic message creation and management used in the field of communication. Students will apply the basics of visual layout skills and the principles of visual design to create messages using words and images.

SG91	Robert Coleman MW 9:00am - 10:45am *Restricted to COMM students at Shady Grove.*	Seats (Total: 25) BLD3 3216

COMM374 **Communicating Visually: Message Production and Digital Media**

Credits: 3 Grading Method: Regular

Restriction: Restricted to Communication Majors at the Universities at Shady Grove.

Focus on the interplay between technology, images and sound in the creation of digital content. This is a communication process by which a digital visual message evolves from conception to completion, incorporating the creative, financial and marketing tools. Students will conceive, plan, recruit and supervise digital video projects, developing a familiarity with production management technique and execution.

Credit only granted for COMM374 or COMM498T.

SG91	Adam Nixon M 4:15pm - 6:45pm *Restricted to COMM students at Shady Grove.*	Seats (Total: 25) BLD3 3216

COMM376 **Communication through Advocacy Short Film**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Communication program.

Explores the theory and practice of contemporary communication and advocacy short form video.

SG91	Adam Nixon Tu 4:15pm - 6:45pm *Restricted to COMM majors at Shady Grove.*	Seats (Total: 25) BLD3 3216

COMM382 **Essentials of Intercultural Communication**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DVCC

Credit only granted for: COMM382 or COMM482.

Introduction of major theories and concepts of intercultural communication; examination of processes that make up cultural differences; and use of intercultural communication competence skills.

0101	Rong Ma MW 3:30pm - 4:45pm	Seats (Total: 35) SKN 0104
0201	Rong Ma MW 5:00pm - 6:15pm	Seats (Total: 35) SYM 0215

0301	Savreen Hundal MW 3:30pm - 4:45pm	Seats (Total: 35) KEY 0102

COMM385 **Influence**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP, SCIS

Credit only granted for: COMM385 or COMM498I (Spring 2014). Formerly: COMM498I (Spring 2014).

Explores contemporary theories of influence and their implications for communication practice. Topics include power and influence, logical theory, rhetorical theory, persuasion theory, framing theory, social influence theory, and propagation of influence in mediated social networks.

0101	Nick Joyce MW 5:00pm - 6:15pm	Seats (Total: 60) SKN 0104

COMM386 **Experiential Learning**

(Perm req)

Credits: 3-6 | Grading Method: Regular, Pass-Fail | General Education: DSSP

Prerequisite: Permission of ARHU-Communication department. Restriction: Junior standing or higher; and must be in Communication program.

Supervised internship experience with communication professionals. Relation of academic training to professional experience.

0101	Julie Gowin Contact instructor or department for details.	Seats (Total: 75)
SG91	Instructor: TBA Contact instructor or department for details.	Seats (Total: 20)

COMM388 **Communication Practicum**

(Perm req)

Credits: 1-3 | Grading Method: Regular, Pass-Fail

Supervised professional-level practice in communication.

Contact department for information to register for this course.

COMM398 **Selected Topics in Communication**

(Perm req)

Credits: 3 | Grading Method: Regular

Topical study of contemporary issues in communication.

Contact department for information to register for this course.

COMM398C **Selected Topics in Communication; Peer Consulting in Oral Communication**

(Perm req)

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

Restricted to majors in Communication. Provides training in the principles and practice of peer consulting in the context of the Oral Communication Center in the Department of Communication. Students will apply and integrate the knowledge and skills acquired in COMM107 (or COMM 200) with new training to help their peers become outstanding listeners and speakers. They will also engage in a group research project designed to extend knowledge in peer consulting best practices.

0101	Jade Olson TuTh 5:00pm - 6:15pm	Seats (Total: 20) SKN 2117

COMM398D **Selected Topics in Communication; Basics of Graphic Design for Strategic Communicators**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

Students will use computer technology to explore the communication potential of type, white space, information graphics, photographs, and other design elements and apply them to publications relevant to the publications relevant to the public relations industry. Prerequisite: COMM201

0101	Erich Sommerfeldt F 1:00pm - 4:00pm	Seats (Total: 18) PLS 1129

COMM398E **Selected Topics in Communication; Health Communication**

(Perm req)

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

This course is restricted to students in the Departmental Honors Program. Please contact commadvising@umd.edu for permission to register.

0101	Kang Namkoong MW 2:00pm - 3:15pm	Seats (Total: 15) HBK 0103

COMM398J **Selected Topics in Communication; Communcation and Advanced Digital Imaging**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

Continuation of COMM398N (although COMM398N is not a prerequisite). Concentration is on advanced visual imaging, with theme-based projects that incorporate advanced features of Photoshop CC, including raw imaging.

SG91	Robert Coleman	Seats (Total: 25)
	MW 2:00pm - 3:45pm	BLD3 3216
	Restricted to COMM students at Shady Grove.	

COMM398L **Selected Topics in Communication; Science Media and the Public**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

Designed to introduce the interrelationship among science, media, and society. We will address current thinking about how do mass media shape the nature of public debates about science, where do people go for information about science, and how public understand science. Upon successful completion, students will be able to specify the roles of knowledge, expertise, risk, media, public understanding and discourse play in perceptions of science and policy making.

0101	Ji Youn Kim	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	HBK 0105

COMM398P **Selected Topics in Communication; Advanced Strategic Message Design**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

SG91	Robert Coleman	Seats (Total: 25)
	MW 11:00am - 12:15pm	BLD3 3216
	Restricted to COMM students at Shady Grove.	

COMM398Q **Selected Topics in Communication; Social Media Analytics**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

SG91	Adam Nixon	Seats (Total: 40)
	W 4:15pm - 6:45pm	BLD3 3225
	Restricted to COMM students at Shady Grove.	

COMM398R **Selected Topics in Communication; Interactive Online Media**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

Contact department for information to register for this course.

COMM398V **Selected Topics in Communication; Introduction to Translation and Interpreting**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

SG91	Garrett Bradford	Seats (Total: 40)
	Tu 5:00pm - 7:30pm	BLD3 4206
	Restricted to COMM students at Shady Grove.	

COMM398Y **Selected Topics in Communication; Briefing**

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

SG91	Andrew Wolvin	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	BLD3 2226
	Restricted to COMM students at Shady Grove.	

COMM399 **Honors Thesis**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

COMM400 **Research Methods in Communication**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM250; and must have an introductory course in statistics. Restriction: Must be in Communication program.

Philosophy of scientific method; role of theory; research ethics; empirical research methods (measurement, sampling, design, analysis).

Attendance on the first day of class is mandatory.

0101	Nick Joyce MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 20) ATL 2324 EDU 2101	Discussion
0102	Nick Joyce MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 20) ATL 2324 EDU 3236	Discussion
0103	Nick Joyce MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 20) ATL 2324 EDU 3236	Discussion
0104	Nick Joyce MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 20) ATL 2324 EDU 2101	Discussion
0105	Nick Joyce MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 20) ATL 2324 EDU 2102	Discussion
0106	Nick Joyce MW 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 20) ATL 2324 EDU 2101	Discussion
SG91	Soyoung Bae TuTh 12:30pm - 1:45pm *Restricted to COMM students at Shady Grove.*	Seats (Total: 40) BLD3 4212	
SG92	Soyoung Bae TuTh 11:00am - 12:15pm *estricted to COMM students at Shady Grove.*	Seats (Total: 40) Location: TBA	

COMM401 **Interpreting Strategic Discourse**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM250. Restriction: Must be in Communication program.

Principles and approaches for practical analysis of discourse designed to shape audience opinion.

0101	Michelle Yang TuTh 2:00pm - 2:50pm W 9:00am - 9:50am	Seats (Total: 20) SKN 0200 HBK 0108	Discussion
0102	Michelle Yang TuTh 2:00pm - 2:50pm W 10:00am - 10:50am	Seats (Total: 20) SKN 0200 HBK 0108	Discussion
0103	Michelle Yang TuTh 2:00pm - 2:50pm W 11:00am - 11:50am	Seats (Total: 20) SKN 0200 HBK 0108	Discussion
0104	Michelle Yang TuTh 2:00pm - 2:50pm W 9:00am - 9:50am	Seats (Total: 20) SKN 0200 HBK 0125	Discussion
0105	Michelle Yang TuTh 2:00pm - 2:50pm W 10:00am - 10:50am	Seats (Total: 20) SKN 0200 HBK 0125	Discussion
0106	Michelle Yang TuTh 2:00pm - 2:50pm W 11:00am - 11:50am	Seats (Total: 20) SKN 0200 HBK 0125	Discussion

COMM402 **Communication Theory and Process**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM250. Restriction: Must be in Communication program.

Philosophical and conceptual analysis of communication theories.

0101	Kang Namkoong MW 12:00pm - 12:50pm M 9:00am - 9:50am	Seats (Total: 20) ASY 2203 ASY 3217	Discussion
0102	Kang Namkoong MW 12:00pm - 12:50pm M 10:00am - 10:50am	Seats (Total: 20) ASY 2203 ASY 3217	Discussion

0103	Kang Namkoong MW 12:00pm - 12:50pm M 11:00am - 11:50am	Seats (Total: 20) ASY 2203 ASY 3219	Discussion
0105	Kang Namkoong MW 12:00pm - 12:50pm M 10:00am - 10:50am	Seats (Total: 20) ASY 2203 KEY 1117	Discussion
0106	Kang Namkoong MW 12:00pm - 12:50pm M 11:00am - 11:50am	Seats (Total: 20) ASY 2203 KEY 1117	Discussion

COMM424 **Communication in Complex Organizations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Structure and function of communication within organizations: organizational climate and culture, information flow, networks and role relationships.

0101	Lindsey Anderson TuTh 12:30pm - 1:45pm	Seats (Total: 35) TYD 2102

COMM425 **Negotiation and Conflict Management**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Role of communication in shaping negotiation and conflict processes and outcomes.

Restricted to COMM majors.

0101	Lauren Edelstein TuTh 11:00am - 12:15pm	Seats (Total: 50) HBK 0302J

COMM426 **Conflict Management**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: COMM425; and COMM250; and COMM402.

Role of communication in managing conflict processes.

Restricted to COMM majors.

0101	Lauren Edelstein TuTh 9:30am - 10:45am	Seats (Total: 50) HBK 0302J

COMM435 **Theories of Interpersonal Communication**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM400; or permission of ARHU-Communication department.

Major theoretical approaches and research trends in the study of interpersonal communication.

0101	Dale Hample TuTh 5:00pm - 6:15pm	Seats (Total: 35) TYD 1114

COMM436 **Interpersonal Arguing**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM400 and COMM250. Restriction: Must be in Communication program. Credit only granted for: COMM436 or COMM498I. Formerly: COMM498I.

An examination of face to face arguing.

0101	Dale Hample TuTh 3:30pm - 4:45pm	Seats (Total: 35) TYD 1108

COMM461 **Voices of Public Leadership in the Twentieth Century**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Study of the use of speaking in the power struggles of the twentieth century. Focus is on important speakers of the century, their social and policy influence, and the struggle to expand the diversity of voices with power in the public sphere.

0101	Carly Woods TuTh 9:30am - 10:45am	Seats (Total: 35) SKN 0104

COMM470 **Listening**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The principles of listening behavior.

SG91	Andrew Wolvin TuTh 9:00am - 10:15am *Restricted to COMM students at Shady Grove.*	Seats (Total: 35) BLD3 2226

COMM475 **Persuasion**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Bases of persuasion, with emphasis on recent experimental developments in persuasion.

Restricted to COMM majors.

0101	Soyoung Bae MW 2:00pm - 3:15pm	Seats (Total: 45) ESJ 2309
0201	Susan Hubbard MW 12:30pm - 1:45pm	Seats (Total: 45) SKN 0104
SG91	Soyoung Bae TuTh 2:00pm - 3:15pm *Restricted to COMM students at Shady Grove.*	Seats (Total: 40) BLD3 4212

COMM476 **Language, Communication, and Action**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The nature of communication as symbolic action. Topics include language meaning, intention, understanding, and consequences of communication.

0101	Elizabeth Toth MW 3:30pm - 4:45pm	Seats (Total: 35) KEY 1117

COMM478 **Communication Colloquium**

Credits: 1 Grading Method: Regular

Current trends and issues in the field of communication, stressing recent research methods. Recommended for senior and graduate student majors and minors in communication.

0101	Ji Youn Kim F 12:00pm - 1:30pm	Seats (Total: 40) SKN 0200

COMM483 **Senior Seminar in Public Relations**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: COMM351 and COMM400. Credit only granted for: COMM483 or JOUR483. Formerly: JOUR483.

Integration of theory, techniques and research methods into the planning and execution of public relations campaigns for specific organizations. Analysis of research on the case studies of public relations.

Restricted to majors in Communitcation

0101	Susan Simon TuTh 12:30pm - 1:45pm	Seats (Total: 20) SKN 1112
0201	Sun Young Lee TuTh 3:30pm - 4:45pm	Seats (Total: 20) KEY 0123
0301	Susan Simon TuTh 11:00am - 12:15pm	Seats (Total: 20) TYD 1108
0401	Sun Young Lee TuTh 5:00pm - 6:15pm	Seats (Total: 20) KEY 0123

COMM488 **Communication Portfolio Project**

(Perm req)

Credits: 1 Grading Method: Regular

Preparation of the professional communication portfolio.

Contact department for information to register for this course.

COMM488I **Communication Portfolio Project; Strategic Interviewing**

Credits: 1 Grading Method: Regular

Preparation of the professional communication portfolio.

This course introduces students to advanced techniques in interviewing for job opportunities and career progression. This online course focuses on the dynamics of the interview process, the communication theories and best practices behind influence and persuasion, and the communication aptitudes and skills that distinguish top candidates.

0101	Luke Capizzo	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

COMM489 **Topical Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Individualized research projects conducted with a faculty sponsor.

Contact department for information to register for this course.

COMM498C **Seminar; Public Relations Management**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Present-day communication research.

Restricted to COMM majors (1506A) only.

0101	Elizabeth Toth	Seats (Total: 35)
	MW 2:00pm - 3:15pm	SKN 0104

COMM498K **Seminar; Seminar in Public Relations Publics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Present-day communication research.

Restricted to COMM majors (1506A) only. Pre-requisite: must have completed COMM201. Analysis of public relations programs aimed at organizational publics. Media, issue-related, community, employee, governmental, consumer, financial, and student/educator publics. Theories of the nature of publics, communication behavior of publics, and effects of public relations programs aimed at different publics.

0101	Erich Sommerfeldt	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	HBK 0109

COMM498N **Seminar; Creating the Narrative: Genre-Filmmaking and Dramatic Structure**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Present-day communication research.

First time filmmakers often use genre traditions to break into the profession. In this class we will explore the history, motifs, and technique of the horror, suspense and romantic comedy genres.

SG91	Adam Nixon	Seats (Total: 25)
	Th 4:15pm - 6:45pm	BLD3 3216
	Restricted to COMM students at Shady Grove.	

COMM498R **Seminar; Risk Communiation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Present-day communication research.

0101	Ji Youn Kim	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	SKN 0104

COMM498Y **Seminar; Freedom of Speech and the First Amendment**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Present-day communication research.

This course examines the U.S. Supreme Court's rulings on freedom of speech cases grounded in the First Amendment.

0101	Anne Smithson	Seats (Total: 35)
	MWF 12:00pm - 12:50pm	KEY 0126

COMM606 **Seminar in Communication Management**

Credits: 3 Grading Method: Regular, Audit

Restriction: Restricted to GCPS (Z045) in Communication; or must be in Public Management-Executive Masters (Master's) program.

Communication and public relations as a managed function of organizations are introduced. Students learn how managing communication contributes to organizational effectiveness. Using organizational theory, theories of Excellence in public relations and communication management, communication metrics and communication ethics, students build their communication strategic management skills beyond the programmatic level to the functional and organizational levels of decision-making.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

Click here for more course information.

PG01	Elisabetta Ullmann, Stephen Lank Th 9:00am - 11:50am	Seats (Total: 16) SKN 2127

COMM609 **Fundamentals of Interpreting**

Credits: 2-6 Grading Method: Regular, Audit

Develops a systematic, reflective approach to interpreting tasks in real-world settings and outlines the use of different modes of interpreting under professional working conditions. Provides an overview of interpreting skills with exercises to develop them, including focus on active listening and analysis, effective use of memory, and delivery of the target message. Interpreting strategies and techniques in both dialogue and formal consecutive settings are discussed and practiced in a range of interpreting domains. Includes sight translation.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Esperanza Pombo Lopez-Barron Contact instructor or department for details.	Seats (Total: 30)

COMM609A **Fundamentals of Interpreting; Methodology**

Credits: 1 Grading Method: Regular, Audit

Develops a systematic, reflective approach to interpreting tasks in real-world settings and outlines the use of different modes of interpreting under professional working conditions. Provides an overview of interpreting skills with exercises to develop them, including focus on active listening and analysis, effective use of memory, and delivery of the target message. Interpreting strategies and techniques in both dialogue and formal consecutive settings are discussed and practiced in a range of interpreting domains. Includes sight translation.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XG01	Esperanza Pombo Lopez-Barron Tu 12:30pm - 2:30pm	Seats (Total: 16) SKN 3117

COMM609B **Fundamentals of Interpreting; Arabic into English/English into Arabic**

Credits: 1 Grading Method: Regular, Audit

Develops a systematic, reflective approach to interpreting tasks in real-world settings and outlines the use of different modes of interpreting under professional working conditions. Provides an overview of interpreting skills with exercises to develop them, including focus on active listening and analysis, effective use of memory, and delivery of the target message. Interpreting strategies and techniques in both dialogue and formal consecutive settings are discussed and practiced in a range of interpreting domains. Includes sight translation.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGA1	Ihab Ali Sa 11:00am - 11:50am	Seats (Total: 16) SKN 3117
XGE1	Ihab Ali Sa 12:00pm - 12:50pm	Seats (Total: 16) SKN 3117

COMM609C **Fundamentals of Interpreting; Sight Translation - Arabic into English/English into Arabic**

Credits: 1 Grading Method: Regular, Audit

Develops a systematic, reflective approach to interpreting tasks in real-world settings and outlines the use of different modes of interpreting under professional working conditions. Provides an overview of interpreting skills with exercises to develop them, including focus on active listening and analysis, effective use of memory, and delivery of the target message. Interpreting strategies and techniques in both dialogue and formal consecutive settings are discussed and practiced in a range of interpreting domains. Includes sight translation.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGA1	John Samaha Jr Contact instructor or department for details.	Seats (Total: 16)
XGE1	John Samaha Jr Contact instructor or department for details.	Seats (Total: 16)

COMM619 **Consecutive Interpretation**

Credits: 2-6 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 16)
	Contact instructor or department for details.	

COMM619A **Consecutive Interpretation; Methodology**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XG01	Esperanza Pombo Lopez-Barron	Seats (Total: 16)
	Tu 12:30pm - 2:30pm	SKN 3117
	Biweekly. Start Date: 01-29.	

COMM619B **Consecutive Interpretation; Arabic into English/English into Arabic**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGA1	Ihab Ali	Seats (Total: 16)
	Sa 11:00am - 11:50am	SKN 3117

XGE1	Ihab Ali Sa 12:00pm - 12:50pm	Seats (Total: 16) SKN 3117

COMM619C **Consecutive Interpretation; Sight Translation: Arabic into English/English into Arabic**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGA1	John Samaha Jr Contact instructor or department for details.	Seats (Total: 16)
XGE1	John Samaha Jr Contact instructor or department for details.	Seats (Total: 16)

COMM619D **Consecutive Interpretation; Chinese into English/English into Chinese**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGC1	Min Eu Contact instructor or department for details. Contact instructor or department for details. *Chinese into English. Biweekly. Start Date: 01-28.*	Seats (Total: 16)

XGE1	Min Eu	Seats (Total: 16)
	Contact instructor or department for details. Contact instructor or department for details.	
	English into Chinese.Biweekly. Start Date: 01-28.	

COMM619E **Consecutive Interpretation; Sight Translation; Chinese into English/English into Chinese**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGC1	Irina Knizhnik	Seats (Total: 16)
	W 6:00pm - 6:50pm Contact instructor or department for details.	PLS 1113
	Chinese into English. Biweekly. Start Date: 01-30.	
XGE1	Min Eu	Seats (Total: 10)
	Contact instructor or department for details. Contact instructor or department for details.	
	English into Chinese. Biweekly. Start Date: 01-28.	

COMM619O **Consecutive Interpretation; English into Russian/Russian into English**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Sergei Chernov Sa 9:30am - 9:50am Contact instructor or department for details. *English into Russian. Start Date 02-02.*	Seats (Total: 16) SKN 3117
XGR1	Nikolai Sorokin Tu 10:00am - 11:50am *Russian into English. Biweekly. Start Date: 01-29.*	Seats (Total: 16) SKN 3118

COMM619P **Consecutive Interpretation; Sight Translation; English into Russian/Russian into English**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Sergei Chernov Sa 10:00am - 10:30am Contact instructor or department for details. *English into Russian. Start Date 02-02.*	Seats (Total: 16) SKN 3117
XGR1	Nikolai Sorokin Tu 2:30pm - 3:30pm Contact instructor or department for details. *Russian into English. Biweekly. Start Date: 01-29.*	Seats (Total: 16) SKN 3118

COMM619V **Consecutive Interpretation; Spanish into Russian/Russian into Spanish**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGS1	Sergei Chernov	Seats (Total: 16)
	F 2:00pm - 2:50pm	SKN 3117
	Contact instructor or department for details.	

COMM619W **Consecutive Interpretation; Sight Translation: Spanish into Russian/Russian into Spanish**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGS1	Sergei Chernov	Seats (Total: 16)
	F 3:00pm - 3:50pm	SKN 3117
	Contact instructor or department for details.	

COMM629 **Introduction to Simultaneous Interpretation**

Credits: 1 Grading Method: Regular, Audit

Builds upon the overview of the simultaneous mode in Fundamentals of Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth. Challenges of simultaneous interpreting, including split attention, ear-voice span, and voice and microphone technique are addressed. Participants become familiar with the booth and exercises required to build simultaneous skills. Role and use of portable equipment in professional settings are discussed. Recommended as preparation for the M.A. entrance examination.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 16)
	Contact instructor or department for details.	

COMM629A **Introduction to Simultaneous Interpretation; Arabic into English/English into Arabic**

Credits: 1 Grading Method: Regular, Audit

Builds upon the overview of the simultaneous mode in Fundamentals of Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth. Challenges of simultaneous interpreting, including split attention, ear-voice span, and voice and microphone technique are addressed. Participants become familiar with the booth and exercises required to build simultaneous skills. Role and use of portable equipment in professional settings are discussed. Recommended as preparation for the M.A. entrance examination.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGA1	Ihab Ali Contact instructor or department for details.	Seats (Total: 16)
XGE1	Ihab Ali Contact instructor or department for details.	Seats (Total: 16)

COMM629D **Introduction to Simultaneous Interpretation; Chinese into English/English into Chinese**

Credits: 1 Grading Method: Regular, Audit

Builds upon the overview of the simultaneous mode in Fundamentals of Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth. Challenges of simultaneous interpreting, including split attention, ear-voice span, and voice and microphone technique are addressed. Participants become familiar with the booth and exercises required to build simultaneous skills. Role and use of portable equipment in professional settings are discussed. Recommended as preparation for the M.A. entrance examination.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGC1	Instructor: TBA Contact instructor or department for details. Contact instructor or department for details. *Chinese into English.*	Seats (Total: 16)
XGE1	Instructor: TBA Contact instructor or department for details. Contact instructor or department for details. *English into Chinese.*	Seats (Total: 16)

COMM629N **Introduction to Simultaneous Interpretation; English into Russian/Russian into English**

Credits: 1 Grading Method: Regular, Audit

Builds upon the overview of the simultaneous mode in Fundamentals of Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth. Challenges of simultaneous interpreting, including split attention, ear-voice span, and voice and microphone technique are addressed. Participants become familiar with the booth and exercises required to build simultaneous skills. Role and use of portable equipment in professional settings are discussed. Recommended as preparation for the M.A. entrance examination.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Sergei Chernov Sa 12:30pm - 1:10pm Contact instructor or department for details. *English into Russian. Start Date: 02-02.*	Seats (Total: 16) SKN 3118
XGR1	Nikolai Sorokin Tu 9:00am - 9:50am *Russian into English. Biweekly. Start Date: 01-29.*	Seats (Total: 16) SKN 3118

COMM629R **Introduction to Simultaneous Interpretation; Spanish into Russian/Russian into Spanish**

Credits: 1 Grading Method: Regular, Audit

Builds upon the overview of the simultaneous mode in Fundamentals of Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth. Challenges of simultaneous interpreting, including split attention, ear-voice span, and voice and microphone technique are addressed. Participants become familiar with the booth and exercises required to build simultaneous skills. Role and use of portable equipment in professional settings are discussed. Recommended as preparation for the M.A. entrance examination.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGS1	Sergei Chernov F 3:30pm - 4:10pm Contact instructor or department for details. *Spanish into Russian. Start Date: 02-01.*	Seats (Total: 16) SKN 3118

COMM631 **Seminar in Public Relations Publics**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: COMM631 or JOUR631. Formerly: JOUR631.

Analysis of public relations programs aimed at organizational publics. Media, issue-related, community, employee, governmental, consumer, financial, and student/educator publics. Theories of the nature of publics, communication behavior of publics, and effects of public relations programs aimed at different publics.

0101	Erich Sommerfeldt	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	HBK 0109

COMM637 **Professional Practice Forum in Translation: Career Portfolio and Exams**

Credits: 1 Grading Method: Regular, Audit

Prerequisite: Admissions test for second year courses; and (COMM659 and COMM679); and permission of ARHU-Communication department.

Serves as final preparation for entry into the profession through development of career portfolio to meet summative degree requirement and development of strategies for gaining work as a professional translator. Prepares participants for degree examinations and employer tests through the review of previous exam material and employer testing requirements. Serves as venue for degree examinations, career goal setting and planning for future employment. Participants present and defend career portfolio as summative requirement for MA in translation; MA in Trans. and Localization Project.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

Click here for more course information.

PG01	Esperanza Pombo Lopez-Barron, Mollie Kaufer	Seats (Total: 16)
	Tu 10:00am - 11:50am	SKN 3118
	Biweekly. Start Date: 02-05.	

COMM649 **Translation for Specific Domains**

Credits: 2-6 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach introduced in Fundamentals of Translation by addressing the development of translation skills required for specialization in specific domains. In written and sight translation exercises include researching specialized subject material, developing and maintaining terminology, and consulting experts in the field. Includes authentic, real-world translation projects in translation teams. Overview of computer-assisted translation tools and continued work on sight translation enable higher levels of productivity under time constraints.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 24)
	Contact instructor or department for details.	

COMM649A **Translation for Specific Domains; Methodology**

Credits: 2-6 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach introduced in Fundamentals of Translation by addressing the development of translation skills required for specialization in specific domains. In written and sight translation exercises include researching specialized subject material, developing and maintaining terminology, and consulting experts in the field. Includes authentic, real-world translation projects in translation teams. Overview of computer-assisted translation tools and continued work on sight translation enable higher levels of productivity under time constraints.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XG01	Eva Vilarrubi	Seats (Total: 16)
	F 6:00pm - 7:50pm	SKN 3118
	Biweekly. Start Date: 02-01.	

COMM649D **Translation for Specific Domains; Chinese into English/English into Chinese**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach introduced in Fundamentals of Translation by addressing the development of translation skills required for specialization in specific domains. In written and sight translation exercises include researching specialized subject material, developing and maintaining terminology, and consulting experts in the field. Includes authentic, real-world translation projects in translation teams. Overview of computer-assisted translation tools and continued work on sight translation enable higher levels of productivity under time constraints.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGC1	Irina Knizhnik	Seats (Total: 10)
	W 4:00pm - 5:50pm	PLS 1115
	Chinese into English. Biweekly. Start Date: 01-30.	

XGE1	Min Eu	Seats (Total: 9)
	Tu 10:30am - 12:30pm	SKN 3117
	English into Chinese. Biweely. Start Date: 01-29.	

COMM649E **Translation for Specific Domains; Sight Translation; Chinese into English/English into Chinese**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach introduced in Fundamentals of Translation by addressing the development of translation skills required for specialization in specific domains. In written and sight translation exercises include researching specialized subject material, developing and maintaining terminology, and consulting experts in the field. Includes authentic, real-world translation projects in translation teams. Overview of computer-assisted translation tools and continued work on sight translation enable higher levels of productivity under time constraints.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGC1	Irina Knizhnik	Seats (Total: 16)
	W 6:00pm - 6:50pm Contact instructor or department for details.	PLS 1113
	Chinese into English. Biweekly. Start Date: 01-30.	
XGE1	Min Eu	Seats (Total: 10)
	Contact instructor or department for details. Contact instructor or department for details.	
	English into Chinese. Biweekly. Start Date: 01-28.	

COMM649M **Translation for Specific Domains; Spanish into English/English into Spanish**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach introduced in Fundamentals of Translation by addressing the development of translation skills required for specialization in specific domains. In written and sight translation exercises include researching specialized subject material, developing and maintaining terminology, and consulting experts in the field. Includes authentic, real-world translation projects in translation teams. Overview of computer-assisted translation tools and continued work on sight translation enable higher levels of productivity under time constraints.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Eva Vilarrubi F 3:00pm - 3:50pm	Seats (Total: 16) SKN 2127
XGS1	Joseph Mazza Tu 7:00pm - 8:50pm	Seats (Total: 16) PLS 1164

Spanish into English. Meets biweekly, start date: 01-29.

COMM649N **Translation for Specific Domains; Sight Translation; Spanish into English/English into Spanish**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach introduced in Fundamentals of Translation by addressing the development of translation skills required for specialization in specific domains. In written and sight translation exercises include researching specialized subject material, developing and maintaining terminology, and consulting experts in the field. Includes authentic, real-world translation projects in translation teams. Overview of computer-assisted translation tools and continued work on sight translation enable higher levels of productivity under time constraints.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Eva Vilarrubi F 4:00pm - 4:30pm	Seats (Total: 16) SKN 2127
XGS1	Rosalinda Meza-Steel Sa 2:30pm - 3:10pm	Seats (Total: 16) SKN 3118

COMM649O **Translation for Specific Domains; Portuguese into English/English into Portuguese**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach introduced in Fundamentals of Translation by addressing the development of translation skills required for specialization in specific domains. In written and sight translation exercises include researching specialized subject material, developing and maintaining terminology, and consulting experts in the field. Includes authentic, real-world translation projects in translation teams. Overview of computer-assisted translation tools and continued work on sight translation enable higher levels of productivity under time constraints.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Mirna Soares Andrade Tu 6:30pm - 7:30pm Class time/details on ELMs *English into Portuguese. Start Date: 02-19.*	Seats (Total: 16) SKN 3117 ONLINE
XGP1	Robert Feron W 6:00pm - 7:50pm *Portuguese into English. Biweekly. Start Date: 01-30.*	Seats (Total: 16) SKN 3117

COMM649P **Translation for Specific Domains; Sight Translation: Portuguese into English/English into Portuguese**

Credits: 2 Grading Method: Regular, Audit

Builds upon the systematic, reflective approach introduced in Fundamentals of Translation by addressing the development of translation skills required for specialization in specific domains. In written and sight translation exercises include researching specialized subject material, developing and maintaining terminology, and consulting experts in the field. Includes authentic, real-world translation projects in translation teams. Overview of computer-assisted translation tools and continued work on sight translation enable higher levels of productivity under time constraints.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Mirna Soares Andrade Tu 7:30pm - 8:10pm Contact instructor or department for details. *English into Portuguese. Start Date: 02-19.*	Seats (Total: 16) SKN 3117
XGP1	Robert Feron W 8:00pm - 8:50pm Contact instructor or department for details. *Portuguese into English. Biweekly. Start Date: 01-30.*	Seats (Total: 16) SKN 3117

COMM655 **Seminar in Speechwriting**

Credits: 3 Grading Method: Regular, Audit

Formerly: SPCH655.

Theoretical and practical aspects of speechwriting at an advanced level.

PCF1	Trevor Parry-Giles	Seats (Total: 20)
	W 9:00am - 11:50am	SKN 2130
	Restricted to students in the Enhanced English Fluency Program.	

COMM657 **Professional Practice Forum in Interpreting: Career Portfolio and Exams**

Credits: 1 Grading Method: Regular, Audit

Prerequisite: COMM719, COMM769, and COMM729; and admissions test for second-year courses; and permission of ARHU-Communication department.

Serves as final preparation for entry into the profession through development of strategies for gaining work as a professional translator. Prepares participants for degree examinations and employer tests through the review of previous exam material and employer testing requirements. Serves as venue for degree examinations, career goal setting and planning for future employment. Participants present and defend career portfolio and summative requirement for degree.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

Click here for more course information.

PG01	Mollie Kaufer, Esperanza Pombo Lopez-Barron	Seats (Total: 16)
	Tu 10:00am - 11:50am	SKN 3118
	Biweekly. Start Date: 02-05.	

COMM659 **Translation for Language-Specific Markets**

Credits: 1-3 Grading Method: Regular, Audit

Builds translation skills to a highly professional level by developing autonomy in completing authentic, real-world translation projects based upon the reflective approach developed in the first-year curriculum. Develops one or more specializations. Completion of individual and group projects covering all aspects of professional translation from subject matter research, terminology work, and use of computer-assisted translation tools. Sight translation and timed exercises to increase production and meet deadlines.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 30)
	Contact instructor or department for details.	

COMM659B **Translation for Language-Specific Markets; Chinese into English/English into Chinese**

Credits: 1

Grading Method: Regular,
Audit

Builds translation skills to a highly professional level by developing autonomy in completing authentic, real-world translation projects based upon the reflective approach developed in the first-year curriculum. Develops one or more specializations. Completion of individual and group projects covering all aspects of professional translation from subject matter research, terminology work, and use of computer-assisted translation tools. Sight translation and timed exercises to increase production and meet deadlines.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGC1	Irina Knizhnik W 4:00pm - 5:50pm *Chinese into English. Biweekly. Start Date: 01-30.*	Seats (Total: 10) PLS 1115
XGE1	Min Eu Tu 10:30am - 12:30pm *English into Chinese. Biweekly. Start Date: 01-29.*	Seats (Total: 10) SKN 3117

COMM659P **Translation for Language-Specific Markets; Portuguese into English/English into Portuguese**

Credits: 1

Grading Method: Regular,
Audit

Builds translation skills to a highly professional level by developing autonomy in completing authentic, real-world translation projects based upon the reflective approach developed in the first-year curriculum. Develops one or more specializations. Completion of individual and group projects covering all aspects of professional translation from subject matter research, terminology work, and use of computer-assisted translation tools. Sight translation and timed exercises to increase production and meet deadlines.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Mirna Soares Andrade Tu 6:30pm - 7:30pm Contact instructor or department for details. *English into Portuguese. Start Date: 02-19.*	Seats (Total: 16) SKN 3117

XGP1	Robert Feron	Seats (Total: 16)
	W 6:00pm - 7:50pm	SKN 3117
	Portuguese into English. Meets biweekly. Start date: 01-30.	

COMM661 **Communication and Social Change**

Credits: 3 Grading Method: Regular, Audit

Place of rhetoric as the union of the moral and historical in moments of social definition. Reviews theories of discourse in social change including political change, social movements, consciousness change, and more global change. Application to contemporary change.

0101	Carly Woods	Seats (Total: 15)
	Tu 3:30pm - 6:30pm	SKN 2127

COMM669 **Professional Practice Forum in Translation: Practicum**

Credits: 1-3 Grading Method: Regular, Audit

Provides opportunities to complete real-world translation projects on campus and in the public service, legal, business, and political communities as translators, project managers and translators/reviewers working on group projects. Collaboration with participants in the interpreting practicum is also sought to prepare multilingual texts for practicum events and familiarize participants with conference translation. Complements Translation for Specific Markets, and practicum projects are included in course and career reflective practice portfolios. Requires independent study plan agreed with course instructor.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 16)
	W 10:00am - 11:30am	SKN 3117
	Will meet twice on 01-30 and 03-27.	

COMM683 **Intercultural Communication Theory**

Credits: 3 Grading Method: Regular, Audit

An in-depth coverage of the essential theories of intercultural communication is provided.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

Click here for more course information.

PG01	Esperanza Pombo Lopez-Barron Th 2:00pm - 4:50pm	Seats (Total: 16) SKN 3118

COMM688 **Communication Field Experience**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Applications of communication principles and research in professional communication settings.

Contact department for information to register for this course.

COMM698 **Special Problems in Communication**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

COMM698C **Special Problems in Communication; Risk and Crisis Communication**

Credits: 1-3 Grading Method: Regular, Audit

0101	Brooke Liu M 3:30pm - 6:20pm	Seats (Total: 15) SKN 2127

COMM708 **Professional Communication: Rhetoric and Context**

Credits: 3 Grading Method: Regular

A skills-based course in speaking and writing in English for professional communicators adapting to a diversity of contexts, including business, health, law, politics, and science. Focus on diversifying the different contexts in which speaking and writing take place. Designed to develop an ability to adapt messages to a diversity of professional communication contexts, address the role of culture in adapting messages to a diversity of professional communication contexts, hone English speaking and writing skills based on a diversity of language registers, gain experience working with technical vocabulary, enhance analytical skills, strengthen research skills, enhance critical thinking skills, develop software technology skills.

PCF1	Mollie Kaufer Tu 12:00pm - 2:50pm *Restricted to students in the Enhanced English Fluency Program.*	Seats (Total: 20) Location: TBA

COMM710 **Translation and Localization Project Management**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Admissions test for second year courses; and permission of ARHU-Communication department.

Introduces basic principles of project management in the translation industry based upon globalization and localization processes for software, websites, and other translation-driven products. Focuses on information technology and workflow in large-scale multilingual projects. Examines planning, execution, and evaluation processes grounded in best practices and standards of the translation and localization industry.

PG01	Thomas Alwood	Seats (Total: 16)
	Class time/details on ELMs	ONLINE

COMM719 **Advanced Consecutive Interpretation**

Credits: 2-3

Grading Method: Regular, Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Ihab Ali	Seats (Total: 30)
	Contact instructor or department for details.	

COMM719A **Advanced Consecutive Interpretation; Arabic into English/English into Arabic**

Credits: 1

Grading Method: Regular, Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

Contact department for information to register for this course.

COMM719C **Advanced Consecutive Interpretation; French into English/English into French**

Credits: 1

Grading Method: Regular, Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Pascale Kraus Sa 9:00am - 10:50am *English into French. Biweekly, Start Date 02-02.*	Seats (Total: 16) SKN 3118
XGF1	Pascale Kraus W 5:30pm - 6:30pm *French into English. Weekly, Start Date 01-30.*	Seats (Total: 16) SKN 3118

COMM719D **Advanced Consecutive Interpretation; Russian into English/English into Russian**

Credits: 1

Grading Method: Regular, Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Sergei Chernov Sa 9:30am - 9:50am *English into Russian.*	Seats (Total: 16) SKN 3117
XGR1	Nikolai Sorokin Tu 10:00am - 11:50am *Russian into English. Biweekly, Start Date: 01-29.*	Seats (Total: 16) SKN 3118

COMM719F **Advanced Consecutive Interpretation; Spanish into English/English into Spanish**

Credits: 1

Grading Method: Regular,
Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Rosalinda Meza-Steel Sa 9:00am - 9:50am *English into Spanish.*	Seats (Total: 16) SKN 2127
XGS1	Rosalinda Meza-Steel Sa 10:00am - 10:50am *Spanish into English.*	Seats (Total: 16) SKN 2127

COMM719I **Advanced Consecutive Interpretation; Italian into Spanish/Spanish into Italian**

Credits: 1

Grading Method: Regular,
Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGI1	Instructor: TBA Sa 10:00am - 11:50am *Italian into Spanish. Biweekly, Start Date: 02-02.*	Seats (Total: 16) ONLINE

COMM719J **Advanced Consecutive Interpretation; French into Spanish/Spanish into French**

Credits: 1

Grading Method: Regular,
Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGF1	Rosalinda Meza-Steel Sa 11:30am - 12:30pm *French into Spanish.*	Seats (Total: 16) SKN 2127

COMM730 **Seminar in Health Communication**

Credits: 3 Grading Method: Regular, Audit

Formerly: SPCH730.

Communication processes in health care and promotion.

0101	Xiaoli Nan Th 3:30pm - 6:30pm	Seats (Total: 15) SKN 2127
PG01	Velandia-Pardo Carol-Gizell Tu 5:00pm - 7:50pm *Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu*	Seats (Total: 16) SKN 3118

COMM738V **Seminar in Mediated Communication; Visuality**

Credits: 3-12 Grading Method: Regular, Audit

The examination of special topics related to the study of mediated communication.

0101	Michelle Yang Th 6:30pm - 9:30pm	Seats (Total: 15) SKN 3117

COMM749 **Advanced Simultaneous Interpretation**

Credits: 1-3 Grading Method: Regular, Audit

Builds simultaneous interpreting skills to a highly professional level, including highly complex material requiring particular attention to nuance, tone, and style. Resolves any remaining challenges of split attention, ear-voice span, memory and delivery / presentation. Introduces simultaneous interpretation with text, based upon sight translation techniques. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Esperanza Pombo Lopez-Barron Contact instructor or department for details.	Seats (Total: 16)

COMM749C **Advanced Simultaneous Interpretation; French into English/English into French**

Credits: 1 Grading Method: Regular, Audit

Builds simultaneous interpreting skills to a highly professional level, including highly complex material requiring particular attention to nuance, tone, and style. Resolves any remaining challenges of split attention, ear-voice span, memory and delivery / presentation. Introduces simultaneous interpretation with text, based upon sight translation techniques. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Pascale Kraus Contact instructor or department for details. *English into French.*	Seats (Total: 16)
XGF1	Pascale Kraus W 3:30pm - 5:30pm *French into English. Start Date: 01-30.*	Seats (Total: 16) SKN 3118

COMM749D **Advanced Simultaneous Interpretation; Russian into English/English into Russian**

Credits: 1 Grading Method: Regular, Audit

Builds simultaneous interpreting skills to a highly professional level, including highly complex material requiring particular attention to nuance, tone, and style. Resolves any remaining challenges of split attention, ear-voice span, memory and delivery / presentation. Introduces simultaneous interpretation with text, based upon sight translation techniques. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Sergei Chernov Sa 11:30am - 12:30pm *English into Russian.*	Seats (Total: 16) SKN 3118
XGR1	Nikolai Sorokin Tu 12:00pm - 1:50pm *Russian into English. Biweekly, Start Date: 01-29.*	Seats (Total: 16) SKN 3118

COMM749F Advanced Simultaneous Interpretation; Spanish into English/English into Spanish

Credits: 1 Grading Method: Regular, Audit

Builds simultaneous interpreting skills to a highly professional level, including highly complex material requiring particular attention to nuance, tone, and style. Resolves any remaining challenges of split attention, ear-voice span, memory and delivery / presentation. Introduces simultaneous interpretation with text, based upon sight translation techniques. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGE1	Karin Ruckhaus F 12:00pm - 1:50pm *English into Spanish. Biweekly. Start Date: 02-01.*	Seats (Total: 16) SKN 3118
XGS1	Rosalinda Meza-Steel Sa 1:00pm - 1:50pm *Spanish into English.*	Seats (Total: 16) SKN 3118

COMM749I Advanced Simultaneous Interpretation; Italian into Spanish/Spanish into Italian

Credits: 1

Grading Method: Regular, Audit

Builds simultaneous interpreting skills to a highly professional level, including highly complex material requiring particular attention to nuance, tone, and style. Resolves any remaining challenges of split attention, ear-voice span, memory and delivery / presentation. Introduces simultaneous interpretation with text, based upon sight translation techniques. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

XGS1	Esperanza Pombo Lopez-Barron W 12:00pm - 1:50pm	Seats (Total: 16) SKN 3118

COMM759 **Professional Practice Forum in Interpreting: Practicum**

Credits: 1-3

Grading Method: Regular, Audit

Provides opportunities to interpret consecutively and simultaneously in real-world settings on campus and in the public service, legal, business, and political communities. Develops team leader skills by organizing and convening an event or series of events (conference, debate, or negotiation), selecting topics and delegates, and preparing speeches and arguments to deliver and interpret. Collaboration with participants in M.A. translation courses is sought. Requires independent study plan agreed with course instructor.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Esperanza Pombo Lopez-Barron W 10:00am - 11:30am *Will meet twice on 01-30 and 03-27.*	Seats (Total: 16) SKN 3117

COMM760 **Seminar in Political Communication**

Credits: 3

Grading Method: Regular, Audit

Formerly: SPCH760.

A blend of theory and practice to integrate rhetorical-critical theory and empirical methods with politics. Practitioners in political communication will be drawn in as resource persons. Students will map the communication strategy for candidates and analyze actual campaign strategies.

PCF1	Shawn Parry-Giles	Seats (Total: 20)
	Tu 9:00am - 11:50am	SKN 2130
	Must be in Enhanced English Fluency program, Online. For permission to enroll, contact oes@umd.edu.	

COMM762 **The Rhetoric of Political Institutions**

Credits: 3 Grading Method: Regular

The role of discourse in major political institutions is examined. The specific institutional focus may change from instructor to instructor. Examples include Congress, the courts, or the state legislatures.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

Click here for more course information.

PG01	David Sawyer	Seats (Total: 16)
	Th 5:30pm - 8:30pm	SKN 3118

COMM789A **Seminar: Special Topics in Intercultural Communication; Advanced Political and Legal Communication**

Credits: 3 Grading Method: Regular, Audit

Explores special topic areas within the study of intercultural communication, such as culture and conflict, intercultural negotiation, cross-cultural relationships.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Shawn Parry-Giles, Miriam Stanicic	Seats (Total: 16)
	Th 2:00pm - 3:30pm	SKN 2127
	Sa 8:30am - 11:30am	SKN 3118
	Thursday meetings weekly. Saturday meetings on the following dates: 02-09, 02-23, 03-09, 04-06, 04-20, 05-04; Final Exam TBD.	

COMM789B **Seminar: Special Topics in Intercultural Communication; Advanced Health Communications**

Credits: 3 Grading Method: Regular, Audit

Explores special topic areas within the study of intercultural communication, such as culture and conflict, intercultural negotiation, cross-cultural relationships.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Velandia-Pardo Carol-Gizell Tu 5:00pm - 7:50pm	Seats (Total: 16) SKN 3118

COMM798 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

An individual course designed for intensive study or research of problems in communication.

Contact department for information to register for this course.

COMM798B **Independent Study; Text Analysis and Intensive Writing**

Credits: 1-3 Grading Method: Regular, Audit

An individual course designed for intensive study or research of problems in communication.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Mollie Kaufer Th 11:00am - 11:50am *English.*	Seats (Total: 16) SKN 3117
PG02	Eva Vilarrubi Contact instructor or department for details. *Spanish.*	Seats (Total: 16)

COMM798F **Independent Study; Enhanced English Fluency**

Credits: 1-3 Grading Method: Regular, Audit

An individual course designed for intensive study or research of problems in communication.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Mollie Kaufer Contact instructor or department for details. *By appointment.*	Seats (Total: 16)

COMM798I **Independent Study; Consecutive Interpreting Skills**

Credits: 1-2

Grading Method: Regular, Audit

An individual course designed for intensive study or research of problems in communication.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 16)
	Contact instructor or department for details.	

COMM798J **Independent Study; Translation Skills**

Credits: 1-2

Grading Method: Regular, Audit

An individual course designed for intensive study or research of problems in communication.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 16)
	Contact instructor or department for details.	

COMM798L **Independent Study; Arabic Fluency Enhancement**

Credits: 3

Grading Method: Regular, Audit

An individual course designed for intensive study or research of problems in communication.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Mahmoud Elgibali, Mollie Kaufer	Seats (Total: 16)
	Contact instructor or department for details.	

COMM798P **Independent Study; Portuguese Writing**

Credits: 1

Grading Method: Regular, Audit

An individual course designed for intensive study or research of problems in communication.

Must be in Graduate Studies in Translation and Interpreting; for permission to enroll, contact oes@umd.edu

PG01	Mirna Soares Andrade	Seats (Total: 16)
	Contact instructor or department for details.	

COMM799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

COMM888 **Doctoral Practicum in Communication**

(Perm req)

Credits: 3-9 Grading Method: Regular, Audit

Analysis of professional activity through personal observation. Evaluation of the purpose, process, effectiveness, and efficiency of professional activity. Recommendations for training and further research.

Contact department for information to register for this course.

COMM889 **Doctoral Tutorial in Communication**

(Perm req)

Credits: 3-9 Grading Method: Regular, Audit

Individual research in communication.

Contact department for information to register for this course.

COMM898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

COMM899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

CPBE College Park Scholars-Business, Society, and Economy Spring 2019

CPBE230 **College Park Scholars: Business, Society & the Economy Internship Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPBE100. Restriction: Students must be matriculated into the College Park Scholars Business, Society & the Economy (CPBE) program.

Supervised internship project in an area related to business, society and the economy.

0101	Mark Wellman, Claudia Donnelly Tu 6:00pm - 8:00pm	Seats (Total: 45) Location: TBA

CPBE240 College Park Scholars: Business, Society & the Economy Service-Learning Practicum

Credits: 1-3 Grading Method: Regular

Prerequisite: CPBE100. Restriction: Students must be matriculated into the College Park Scholars Business, Society & the Economy (CPBE) program.

Supervised Service-Learning project in an area related to business, society and the economy.

0101	Mark Wellman, Claudia Donnelly Tu 6:00pm - 8:00pm	Seats (Total: 25) Location: TBA
0102	Mark Wellman, Claudia Donnelly Contact instructor or department for details.	Seats (Total: 10)

CPBE250 College Park Scholars: Business, Society & the Economy Research Practicum

Credits: 1-3 Grading Method: Regular

Prerequisite: CPBE100. Restriction: Students must be matriculated into the College Park Scholars Business, Society & the Economy (CPBE) program.

Supervised research project in an area related to business, society and the economy.

0101	Mark Wellman Tu 6:00pm - 8:00pm	Seats (Total: 20) Location: TBA

CPBE270 College Park Scholars: Business, Society & the Economy Education Abroad Practicum

Credits: 1-3 Grading Method: Regular General Education: DSSP, DVCC, SCIS

Prerequisite: CPBE100. Restriction: Students must be matriculated into the College Park Scholars Business, Society & the Economy (CPBE) program.

Education-abroad experience with content in areas related to business, society and/or the economy.

0101	Mark Wellman Tu 6:00pm - 8:00pm	Seats (Total: 25) Location: TBA	

CPET College Park Scholars- Environment, Technology & Economy Spring 2019

CPET101 **College Park Scholars: Environment, Technology & Economy First-Year Colloquium II**

Credits: 1 Grading Method: Regular

Prerequisite: CPET100. Restriction: Students must be enrolled in the College Park Scholars Environment, Technology & Economy (CPET) program.

Introductory colloquium II: Continued examination of issues related to the convergence of the environment, technology and the economy. Group projects in sustainable development.

0101	Marcella Kim, Lauren Gilmartin, Timothy Knight, Vasiliy Sergueev, Aya Gandolfo W 5:10pm - 6:30pm W 4:10pm - 5:00pm	Seats (Total: 35) ESJ 1202 Location: TBA	Discussion
0102	Marcella Kim, Lauren Gilmartin, Timothy Knight, Aya Gandolfo, Vasiliy Sergueev W 5:10pm - 6:30pm W 5:10pm - 6:00pm	Seats (Total: 35) ESJ 1202 Location: TBA	Discussion
0103	Timothy Knight, Marcella Kim, Aya Gandolfo, Vasiliy Sergueev, Lauren Gilmartin W 5:10pm - 6:30pm W 6:10pm - 7:00pm	Seats (Total: 35) ESJ 1202 Location: TBA	Discussion

CPET230 **College Park Scholars: Environment, Technology & Economy Internship Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPET200. Restriction: Students must be matriculated into the College Park Scholars Environment, Technology & the Economy (CPET) program.

Supervised internship project in an area related to the environment, technology and the economy.

0101	Lauren Gilmartin, Marcella Kim, Timothy Knight, Vasiliy Sergueev, Aya Gandolfo, Alexander Sahi	Seats (Total: 60)
	M 5:10pm - 6:30pm	CCC 1205

CPET240 **College Park Scholars: Environment, Technology & Economy Service-Learning Practicum**

Credits: 1-3 Grading Method: Regular General Education: DSSP

Restriction: Students must be matriculated into the College Park Scholars Environment, Technology & the Economy (CPET), Science, Technology & Society (CPSS), Arts (CPSA) and Business, Society, & Economy (CPBE) programs.

Supervised Service-Learning project in an area related to the environment, technology and the economy.

Restricted to students in the Environment, Technology, and Economy program (CPET).

0101	Marcella Kim, Lauren Gilmartin, Timothy Knight, Alexander Sahi, Aya Gandolfo, Vasiliy Sergueev	Seats (Total: 25)
	M 5:10pm - 6:30pm	CCC 1205

CPET250 **College Park Scholars: Environment, Technology & Economy Research Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPET200. Restriction: Students must be matriculated into the College Park Scholars Environment, Technology & the Economy (CPET) program.

Supervised research project in an area related to the environment, technology and the economy.

0101	Lauren Gilmartin, Marcella Kim, Vasiliy Sergueev, Aya Gandolfo, Timothy Knight, Alexander Sahi	Seats (Total: 15)
	M 5:10pm - 6:30pm	CCC 1205

CPGH College Park Scholars-Global Public Health Spring 2019

CPGH100 **College Park Scholars: Global Public Health First-Year Colloquium I**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Global Public Health (CPGH) program.

Introductory colloquium: Examination of factors that determine the health status of populations around the world.

Contact department for information to register for this course.

CPGH101 **College Park Scholars: Global Public Health First-Year Colloquium II**

Credits: 1 Grading Method: Regular

Prerequisite: CPGH100. Restriction: Students must be enrolled in the College Park Scholars Global Public Health (CPGH) program.

Using case studies, students will examine necessary components to design successful public health interventions.

0101	Muhiuddin Haider, Reva Datar, Abigail Bickford	Seats (Total: 90)
	W 2:00pm - 3:15pm	CCC 1205

CPGH230 **College Park Scholars: Global Public Health - Internship Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPGH200. Restriction: Students must be enrolled in the College Park Scholars Global Public Health (CPGH) program.

Supervised internship project in an interest area related to global public health.

0101	Reva Datar, Elisabeth Maring, Muhiuddin Haider, Abigail Bickford, Haley Axton	Seats (Total: 25)
	M 3:00pm - 3:50pm	CCC 1100

CPGH240 **College Park Scholars: Global Public Health Service-Learning Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPGH200. Restriction: Students must be enrolled in the College Park Scholars Global Public Health (CPGH) program.

Supervised Service-Learning project in an interest area related to global public health.

0101	Muhiuddin Haider, Elisabeth Maring, Abigail Bickford, Reva Datar, Haley Axton	Seats (Total: 30)
	M 3:00pm - 3:50pm	CCC 1100

CPGH250 **College Park Scholars: Global Public Health Research Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPGH200. Restriction: Students must be enrolled in the College Park Scholars Global Public Health (CPGH) program.

Supervised research project in an interest area related to global public health.

0101	Elisabeth Maring, Muhiuddin Haider, Abigail Bickford, Haley Axton, Reva Datar	Seats (Total: 22)
	M 3:00pm - 3:50pm	CCC 1100

CPGH270 **College Park Scholars: Global Public Health Education Abroad Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPGH200. Restriction: Students must be enrolled in the College Park Scholars Global Public Health (CPGH) program.

Education abroad experience in an interest area related to global public health.

0101	Elisabeth Maring, Muhiuddin Haider, Haley Axton, Abigail Bickford, Reva Datar	Seats (Total: 10)
	M 3:00pm - 3:50pm	CCC 1100

CPJT College Park Scholars-Justice and Legal Thought Spring 2019

CPJT101 **Colloquium in Justice and Legal Thought**

Credits: 1 Grading Method: Regular

An exploration of contemporary issues related to justice and legal thought.

0101	Jane Polcen, Erica Smith, Amanda Finney	Seats (Total: 75)
	M 2:00pm - 3:15pm	CCC 1205

CPJT230 **Capstone for Justice and Legal Thought: Internship**

Credits: 2-3 Grading Method: Regular General Education: DSSP

The capstone of the four-semester College Park Scholars Justice and Legal thought citation program is an exploration of justice and law within a rigorous academic and experiential framework. Students must develop and perform practicum internships in professional law related settings. In all settings, students must interact directly with legal professionals in law related fields and through law-related institutions under the supervision of legal professionals and program staff. In conjunction with the experiential component, students will synthesize their experience within the learning outcomes of the Justice and Legal Thought Program through an innovative final project culminating in a poster presentation.

0101	Erica Smith	Seats (Total: 25)
	Contact instructor or department for details.	

CPJT240 **Capstone for Justice and Legal Thought: Service-Learning**

Credits: 2 Grading Method: Regular General Education: DSSP

The capstone of the four-semester College Park Scholars Justice and Legal Thought citation program is an exploration of justice and law within a rigorous academic and experiential framework. Students must develop and perform practicum volunteer experiences in professional law related settings. In all settings, students must interact directly with legal professionals in law related fields and through law-related institutions under the supervision of legal professionals and program staff. In conjunctions with the experiential component, students will synthesize their experience within the learning outcomes of the Justice and Legal Thought program through an innovative final project culminating in a poster presentation.

0101	Erica Smith	Seats (Total: 25)
	Contact instructor or department for details.	

CPJT250 **Capstone for Justice and Legal Thought: Research**

Credits: 2 Grading Method: Regular General Education: DSSP

The capstone of the four-semester College Park Scholars Justice and Legal Thought citation program is an exploration of justice and law within a rigorous academic and experiential framework. Students must develop and perform applied research in a law related setting. Students must interact directly with legal professionals under the supervision of program staff. Students will synthesize their experience within the learning outcomes of the Justice and Legal Thought Program through an innovative final research project culminating in a poster presentation.

0101	Robert Koulish, Jane Polcen, Erica Smith	Seats (Total: 35)
	Contact instructor or department for details.	

CPMS College Park Scholars-Media, Self and Society Spring 2019

CPMS101 **College Park Scholars: Media, Self & Society First-Year Colloquium II**

Credits: 1 Grading Method: Regular

Prerequisite: CPMS100. Restriction: Students must be enrolled in the College Park Scholars Media, Self & Society (CPMS) program.

Examination of the media's coverage of topical issues.

0101	Kalyani Chadha, Kelly Brower	Seats (Total: 95)
	Th 12:30pm - 1:45pm	CCC 1205

CPMS230 **College Park Scholars: Media, Self & Society - Internship Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPMS101. Restriction: Students must be enrolled in the College Park Scholars Media, Self & Society (CPMS) program.

Supervised internship project in an area related to media, self and society.

0101	Kalyani Chadha	Seats (Total: 75)
	Contact instructor or department for details.	

CPMS240 **College Park Scholars: Media, Self & Society - Service-Learning Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPMS101. Restriction: Students must be enrolled in the College Park Scholars Media, Self & Society (CPMS) program.

Supervised Service-Learning project in an area related to media, self and society.

0101	Kalyani Chadha	Seats (Total: 25)
	Contact instructor or department for details.	

CPPL College Park Scholars-Public Leadership Spring 2019

CPPL101 **College Park Scholars: Public Leadership First-Year Colloquium II**

Credits: 1 Grading Method: Regular

Prerequisite: CPPL100. Restriction: Students must be enrolled in the College Park Scholars Public Leadership (CPPL) program.

Continued examination of issues related to public leadership. Development of team, community-based learning project proposals.

0101	Susannah Washburn	Seats (Total: 35)
	W 3:30pm - 4:45pm	CCC 1111
0201	Susannah Washburn	Seats (Total: 25)
	W 3:30pm - 4:45pm	CCC 1105

0301	Susannah Washburn W 3:30pm - 4:45pm	Seats (Total: 35) CCC 1205

CPSA College Park Scholars-Arts Spring 2019

CPSA101 **College Park Scholars: Arts First-Year Colloquium II**

Credits: 1 Grading Method: Regular

Prerequisite: CPSA100. Restriction: Students must be matriculated into the College Park Scholars Arts (CPSA) program.

Introductory colloquium II: Arts workshops and Arts Festival.

0101	Heather-Erin Bremenstuhl, Kenna Hernly, Harold Burgess M 6:00pm - 7:30pm	Seats (Total: 75) CCC 1100

CPSA149 **College Park Scholars: Arts Service-Learning Outreach**

Credits: 2 Grading Method: Regular

Service-Learning outreach to Prince George's County schools and non-profit agencies.

0101	Heather-Erin Bremenstuhl, Harold Burgess Th 5:00pm - 7:00pm	Seats (Total: 20) CCC 1111

CPSA201 **College Park Scholars: Arts Second-Year Colloquium II**

Credits: 1 Grading Method: Regular

Prerequisite: CPSA200. Restriction: Students must be matriculated into the College Park Scholars Arts (CPSA) program.

Advanced colloquium II: Arts workshop and Arts Festival.

0101	Heather-Erin Bremenstuhl, Kenna Hernly, Harold Burgess Tu 6:00pm - 7:30pm	Seats (Total: 75) CCC 1205

CPSA240 **College Park Scholars: Arts Service-Learning Practicum**

Credits: 2 Grading Method: Regular

Prerequisite: CPSA200. Restriction: Students must be matriculated into the College Park Scholars Arts (CPSA) program. Additional information: When paired with successful completion of CPSA 200, students will earn General Education Scholarship-in-Practice credit.

Supervised Service-Learning project in an area related to the arts.

0101	Heather-Erin Bremenstuhl, Harold Burgess, Montserrat Cubillos Guzman Th 5:00pm - 7:00pm	Seats (Total: 15) CCC 1111

CPSA250 **College Park Scholars: Arts Research Practicum**

Credits: 2 Grading Method: Regular General Education: DSSP

Prerequisite: CPSA200. Restriction: Students must be matriculated into the College Park Scholars Arts (CPSA) program. Additional information: When paired with successful completion of CPSA 200, students will earn General Education Scholarship-in-Practice credit.

Supervised research project in an area related to the arts.

0101	Kenna Hernly, Heather-Erin Bremenstuhl, Harold Burgess Th 2:00pm - 2:50pm Contact instructor or department for details.	Seats (Total: 15) CCC 1115
0201	Kenna Hernly, Harold Burgess, Heather-Erin Bremenstuhl W 5:00pm - 5:50pm Contact instructor or department for details.	Seats (Total: 15) CCC 1115
0301	Kenna Hernly, Heather-Erin Bremenstuhl, Harold Burgess W 2:00pm - 2:50pm Contact instructor or department for details.	Seats (Total: 15) CCC 1115

CPSA260 **College Park Scholars: Arts Peer-Teaching Practicum**

Credits: 2 Grading Method: Regular General Education: DSSP

Prerequisite: CPSA200. Restriction: Students must be matriculated into the College Park Scholars Arts (CPSA) program. Additional information: When paired with successful completion of CPSA 200, students will earn General Education Scholarship-in-Practice credit.

Supervised peer-teaching project in an area related to the arts.

0101	Kenna Hernly, Heather-Erin Bremenstuhl, Harold Burgess Contact instructor or department for details.	Seats (Total: 10)
0201	Kenna Hernly, Heather-Erin Bremenstuhl, Harold Burgess Contact instructor or department for details.	Seats (Total: 10)
0301	Heather-Erin Bremenstuhl, Kenna Hernly, Harold Burgess Contact instructor or department for details.	Seats (Total: 10)

CPSD College Park Scholars-Science, Discovery & the Universe — Spring 2019

CPSD100 **College Park Scholars: Science, Discovery & the Universe First-Year Colloquium A**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Science, Discovery & the Universe (CPSD) program. Additional information: Both freshman colloquia (CPSD 100 and 101) are required for students to earn their College Park Scholars citations; however, they can be taken in any order during a student's first year.

Introductory colloquium: Examination of issues related to science, discovery and the universe.

Science and Pseudoscience.

0101	Alan Peel, Erin Thomson, Jennifer Lee Th 3:30pm - 4:30pm	Seats (Total: 40) CCC 1100

CPSD101 **College Park Scholars: Science, Discovery & the Universe First-Year Colloquium B**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Science, Discovery & the Universe (CPSD) program. Additional information: Both freshman colloquia (CPSD 100 and 101) are required for students to earn their College Park Scholars citations; however, they can be taken in any order during a student's first year.

Introductory colloquium: Examination of the intersection of astronomy and culture; and the roles of science, exploration and communication in the process of discovery.

History and Culture of Astronomy.

0101	Alan Peel, Erin Thomson, Jennifer Lee	Seats (Total: 40)
	Th 3:30pm - 4:30pm	CCC 1205

CPSD230 **College Park Scholars: Science, Discovery & the Universe - Internship Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPSD200. Restriction: Students must be enrolled in the College Park Scholars Science, Discovery & the Universe (CPSD) program.

Supervised internship project in an interest area related to science, discovery and the universe.

0101	Alan Peel, Jennifer Lee	Seats (Total: 25)
	Th 5:30pm - 6:30pm	CCC 1100

CPSD240 **College Park Scholars: Science, Discovery & the Universe - Service-Learning Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPSD200. Restriction: Students must be enrolled in the College Park Scholars Science, Discovery & the Universe (CPSD) program.

Supervised Service-Learning project in an interest area related to science, discovery and the universe.

0101	Alan Peel	Seats (Total: 10)
	Th 5:30pm - 6:30pm	CCC 1100

CPSD250 **College Park Scholars: Science, Discovery & the Universe - Research Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPSD200. Restriction: Students must be enrolled in the College Park Scholars Science, Discovery & the Universe (CPSD) program.

Supervised research project in an interest area related to science, discovery and the universe.

0101	Alan Peel, Jennifer Lee	Seats (Total: 25)
	Th 5:30pm - 6:30pm	CCC 1100

CPSF College Park Scholars-Life Sciences Spring 2019

CPSF101 **College Park Scholars: Life Sciences First-Year Colloquium II**

Credits: 1 Grading Method: Regular

Prerequisite: CPSF100. Restriction: Students must be enrolled in the College Park Scholars Life Sciences (CPSF) program.

Further examination of issues related to the life sciences.

0101	Beth Parent	Seats (Total: 100)
	W 3:30pm - 5:30pm	PLS 1140

CPSG College Park Scholars-Science and Global Change — Spring 2019

CPSG101 **College Park Scholars: Science & Global Change First-Year Colloquium II**

Credits: 1 Grading Method: Regular

Prerequisite: CPSG100. Restriction: Students must be enrolled in the College Park Scholars Science & Global Change (CPSG) program.

Introductory colloquium II: Continued examination of issues related to science and global change.

0101	Thomas Holtz	Seats (Total: 91)
	Tu 3:30pm - 4:50pm	CCC 1100

CPSG230 **College Park Scholars: Science & Global Change - Internship Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPSG200. Restriction: Students must be enrolled in the College Park Scholars Science & Global Change (CPSG) program.

Supervised internship in an interest area related to science and global change.

0101	Thomas Holtz, John Merck	Seats (Total: 75)
	Contact instructor or department for details.	

CPSG240 **College Park Scholars: Science & Global Change - Service-Learning Practicum**

Credits: 1-3 Grading Method: Regular

Prerequisite: CPSG200. Restriction: Students must be enrolled in the College Park Scholars Science & Global Change (CPSG) program.

Supervised Service-Learning experience in an interest area related to science and global change.

0101	John Merck, Thomas Holtz	Seats (Total: 25)
	Contact instructor or department for details.	

CPSG250 **College Park Scholars: Science & Global Change - Research Practicum**

Credits: 1-3 Grading Method: Regular General Education: DSSP

Prerequisite: CPSG200. Restriction: Students must be enrolled in the College Park Scholars Science & Global Change (CPSG) program.

Supervised research experience in an interest area related to science and global change.

0101	Thomas Holtz, John Merck Contact instructor or department for details.	Seats (Total: 25)

CPSN College Park Scholars-International Studies Spring 2019

CPSN101 **College Park Scholars: International Studies First-Year Colloquium II**

Credits: 1 Grading Method: Regular General Education: DVCC

Prerequisite: CPSN100. Restriction: Students must be enrolled in the College Park Scholars International Studies (CPSN) program. Additional information: When paired with the successful completion of CPSN 100, students will earn Diversity/Cultural Competence General Education credits.

Introductory colloquium II: Continued examination of issues related to international studies.

0101	James Glass, Margaret McWeeney, Robert Campana, Patrick O'Brien, Sean Rao Tu 2:00pm - 3:15pm	Seats (Total: 25) CCC 1100
0102	Margaret McWeeney, James Glass, Robert Campana, Sean Rao, Patrick O'Brien Tu 2:00pm - 3:15pm	Seats (Total: 25) CBD 1140
0103	James Glass, Margaret McWeeney, Patrick O'Brien, Robert Campana, Sean Rao Tu 2:00pm - 3:15pm	Seats (Total: 25) CCC 1115
0104	Margaret McWeeney, James Glass, Robert Campana, Sean Rao, Patrick O'Brien Tu 2:00pm - 3:15pm	Seats (Total: 25) CCC 1200

CPSN230 **College Park Scholars: International Studies - Internship Practicum**

Credits: 3 Grading Method: Regular

Prerequisite: CPSN101. Restriction: Students must be enrolled in the College Park Scholars International Studies (CPSN) program.

Supervised internship project in an area related to international studies.

0101	Margaret McWeeney, James Glass, Robert Campana, Patrick O'Brien, Sean Rao Contact instructor or department for details.	Seats (Total: 40)

CPSN240 **College Park Scholars: International Studies - Service-Learning Practicum**

Credits: 3 Grading Method: Regular

Prerequisite: CPSN101. Restriction: Students must be enrolled in the College Park Scholars International Studies (CPSN) program.

Supervised Service-Learning project in an area related to international studies.

0101	Margaret McWeeney, James Glass, Robert Campana, Sean Rao, Patrick O'Brien Contact instructor or department for details.	Seats (Total: 15)

CPSN250 **College Park Scholars: International Studies - Research Practicum**

Credits: 3 Grading Method: Regular

Prerequisite: CPSN101. Restriction: Students must be enrolled in the College Park Scholars International Studies (CPSN) program.

Supervised research in an area related to international studies.

0101	James Glass, Margaret McWeeney, Robert Campana, Patrick O'Brien, Sean Rao Contact instructor or department for details.	Seats (Total: 25)

CPSP College Park Scholars Program Spring 2019

CPSP239S **Practicum: Internship; CATCH Clinical Internship**

Credits: 2-3 Grading Method: Regular, Pass-Fail, Audit

Supervised internship in interest area related to the theme of the students' College Park Scholars program.

Contact department for information to register for this course.

CPSP249E **Practicum: Service-Learning; Sustainability and Design**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Supervised Service-Learning project in area related to the theme of the students' College Park Scholars program.

Restricted to College Park Scholars. What happens when you have a great idea, but it gets stuck somewhere? This hands-on class takes on "the impossible" in a real world sustainability problem at UMD. You'll strengthen skills of persistence, rapid experimentation, and problem framing/reframing - all of which you'd use to bring any idea to life.

0101	Mira Azarm, Nicole Mogul	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ESJ 2101

CPSP259I **Practicum: Research**

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Supervised research project in interest area related to the students' College Park Scholars program.

Contact department for information to register for this course.

CPSP259J **Practicum: Research; Media, Self and Society**

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Supervised research project in interest area related to the students' College Park Scholars program.

Restricted to College Park Scholars-Media, Self and Society.

0101	Kalyani Chadha, Nandikoor Bhat	Seats (Total: 10)
	Contact instructor or department for details.	

CPSP259S **Practicum: Research; CATCH Research Assistantship**

Credits: 1-2 | Grading Method: Regular, Pass-Fail, Audit

Supervised research project in interest area related to the students' College Park Scholars program.

Contact department for information to register for this course.

CPSP269E **Practicum: Peer Teaching**

Credits: 2 | Grading Method: Regular, Pass-Fail, Audit

Supervised peer teaching in students' College Park Scholars program.

Contact department for information to register for this course.

CPSP269G **Practicum: Peer Teaching; Science and Global Change**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Supervised peer teaching in students' College Park Scholars program.

Contact department for information to register for this course.

CPSP279K **Practicum: Study Abroad; London and British Empire**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Supervised international experience that satisfies students' College Park Scholars practicum requirement.

Contact department for information to register for this course.

CPSP339 **Advanced Practicum: Internship**

(Perm req)

Credits: 1-3 Grading Method: Regular General Education: DSSP

Independent study designed for students who wish to extend in greater depth and detail projects begun in sophomore year. Subject varies. Overseen by faculty director or mentor.

Contact department for information to register for this course.

CPSP339J **Advanced Practicum: Internship**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Independent study designed for students who wish to extend in greater depth and detail projects begun in sophomore year. Subject varies. Overseen by faculty director or mentor.

0101	Kalyani Chadha	Seats (Total: 10)
	Contact instructor or department for details.	

CPSP339P **Advanced Practicum: Internship**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Independent study designed for students who wish to extend in greater depth and detail projects begun in sophomore year. Subject varies. Overseen by faculty director or mentor.

Contact department for information to register for this course.

CPSP349A **Advanced Practicum: Service Learning**

Credits: 2 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Advanced supervised Service-Learning project.

Contact department for information to register for this course.

CPSP349D **Advanced Practicum: Service Learning; Science, Discovery, and the Universe**

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Advanced supervised Service-Learning project.

Contact department for information to register for this course.

CPSP349G **Advanced Practicum: Service Learning; Science and Global Change**

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Advanced supervised Service-Learning project.

Contact department for information to register for this course.

CPSP349T **Advanced Practicum: Service Learning; Science, Technology, and Society**

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Advanced supervised Service-Learning project.

Contact department for information to register for this course.

CPSP359B **Advanced Practicum: Research**

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Advanced supervised internship experience.

Contact department for information to register for this course.

CPSP359D **Advanced Practicum: Research**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Advanced supervised internship experience.

0101	Alan Peel, Jennifer Lee Contact instructor or department for details.	Seats (Total: 10)

CPSP359G **Advanced Practicum: Research**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Advanced supervised internship experience.

0101	John Merck, Thomas Holtz Contact instructor or department for details.	Seats (Total: 25)

CPSP359I **Advanced Practicum: Research; The Geology, Ecology, and Sustainable Technologies of the Island of Hawaii**

(Perm req)

Credits: 3 | Grading Method: Regular | General Education: DSSP

Advanced supervised internship experience.

Enrollment is by permission only. (DSSP) Credit awarded only for one of GEOL388I and CPSP359I. A special program fee is required. A spring break tour of the big island of Hawaii highlights the island's physical and biological environment, and human society's interactions with it. Pre-departure lectures and exam, and a research project are required.

0101	Jessica Wilke, Lauren Gilmartin, Beth Parent, John Merck Contact instructor or department for details.	Seats (Total: 18)

CPSP359N **Advanced Practicum: Research; International Studies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Advanced supervised internship experience.

0101	Patrick O'Brien, Robert Campana, Margaret McWeeney, James Glass, Sean Rao Contact instructor or department for details.	Seats (Total: 35)

CPSP359S **Advanced Practicum: Research; Discovery Research**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Advanced supervised internship experience.

0101	David Eubanks	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	CCC 1111

CPSP369A **Advanced Practicum: Peer Teaching; Arts**

Credits: 1-3 Grading Method: Regular

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369D **Advanced Practicum: Peer Teaching**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369E **Advanced Practicum: Peer Teaching**

Credits: 1-3 Grading Method: Regular

Supervised advanced practicum in peer instruction.

0101	Lauren Gilmartin, Timothy Knight	Seats (Total: 1)
	Contact instructor or department for details.	

CPSP369G **Advanced Practicum: Peer Teaching; Science and Global Change**

(Perm req)

Credits: 1-3 Grading Method: Regular

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369P **Advanced Practicum: Peer Teaching; Public Leadership**

Credits: 1-3 Grading Method: Regular

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369T **Advanced Practicum: Peer Teaching; Science, Technology, and Society**

Credits: 1-3 Grading Method: Regular

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP379B **Advanced Practicum: Study Abroad; Dubai: Global Immersion Experience**

Credits: 3 Grading Method: Regular

Advanced, supervised study-abroad experience.

Contact department for information to register for this course.

CPSP379D **Advanced Practicum: Study Abroad; United Arab Emirates: Global Immersion**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced, supervised study-abroad experience.

Contact department for information to register for this course.

CPSP386E **Experiential Learning**

Credits: 3-6 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

CPSP388D **Advanced Special Topics in College Park Scholars; Hawaiian Culture**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Interdisciplinary topics of special interest to College Park Scholars, such as legacies of the cold war, environmental ethics, women in leadership, and other timely issues. Projects build on previous work in College Park Scholars.

0101	Mark Wellman	Seats (Total: 1)
	Contact instructor or department for details.	

CPSP388E **Advanced Special Topics in College Park Scholars; Pedagogy and Design in ETE**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Interdisciplinary topics of special interest to College Park Scholars, such as legacies of the cold war, environmental ethics, women in leadership, and other timely issues. Projects build on previous work in College Park Scholars.

Contact department for information to register for this course.

CPSS College Park Scholars-Science, Technology and Society Spring 2019

CPSS101 **College Park Scholars: Science, Technology & Society First-Year Colloquium II**

Credits: 1 Grading Method: Regular

Prerequisite: CPSS100. Restriction: Students must be enrolled in the College Park Scholars Science, Technology & Society (CPSS) program.

Continued examination of issues related to science, technology and society.

0101	David Tomblin M 4:00pm - 5:20pm	Seats (Total: 90) CCC 1100

CPSS225 **College Park Scholars Capstone: Science, Technology, and Society**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Prerequisite: CPSS100. Restriction: Must be in the College Park Scholars Science, Technology & Society (CPSS) program. Formerly: CPSP227.

Exploration and understanding of ways science and technology shape and are shaped by society.

0101	Gregory Rulifson TuTh 9:30am - 10:45am	Seats (Total: 20) CCC 1105
0201	Nicole Mogul TuTh 12:30pm - 1:45pm	Seats (Total: 20) CCC 1105
0301	David Tomblin TuTh 11:00am - 12:15pm	Seats (Total: 20) CCC 1100

CPSS240 **College Park Scholars: Science, Technology & Society - Service-Learning Practicum**

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

Restriction: Matriculation into the College Park Scholars Science, Technology & Society (CPSS) program; or permission of instructor.

Supervised Service-Learning practicum in issues related to science, technology and society.

Robotics Service-Learning in K-12 Schools.

0101	Timothy Reedy TuTh 2:00pm - 3:15pm	Seats (Total: 15) CCC 1205	
0201	Timothy Reedy TuTh 3:30pm - 4:45pm	Seats (Total: 30) CCC 1111	

DANC Dance Spring 2019

DANC109 **Choreography I: Improvisation**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introduction to the process of spontaneous movement discovery involving solo and group movement experiences.

Students must pay a $25.00 lab fee.

5501	Sara Pearson TuTh 11:00am - 12:15pm	Seats (Total: 16) PAC 1610	

DANC128 **Fundamentals of Ballet**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Introduction to ballet technique and terminology for the beginning student.

Students must pay a $25.00 lab fee.

5501	Ronya Anderson TuTh 9:30am - 10:45am	Seats (Total: 25) PAC 1908	Lab

DANC138D **Global Dance Forms; Pilates and Conditioning**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit , D

Movement course. Traditional dances and music of selected cultures.

Students must pay a $25.00 lab fee.

5501	Stacey Carlson TuTh 12:30pm - 1:45pm	Seats (Total: 20) PAC 1611	Lab

DANC148 **Fundamentals of Modern Dance**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Introduction to modern dance with emphasis on the development of fundamental movement skills.

Students must pay a $25.00 lab fee.

5501	Heidi McFall MW 12:30pm - 1:45pm	Seats (Total: 30) PAC 1912	Lab
5502	Ama Law TuTh 2:00pm - 3:15pm	Seats (Total: 30) PAC 1912	Lab
5503	Patrik Widrig TuTh 2:00pm - 3:15pm	Seats (Total: 30) PKT 2102	Lab
5504	Shawn Stone MW 2:00pm - 3:15pm	Seats (Total: 30) PAC 1912	Lab

DANC199 **Practicum in Choreography, Production and Performance I**

(Perm req)

Credits: 1-2 Grading Method: Regular, Pass-Fail, Audit

Choreography, production, and performance of student works, both on and off campus.

Contact department for information to register for this course.

DANC200 **Introduction to Dance**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA, D General Education: DSSP

A study of dance as a form of communication and as an art form; a survey of the theories and styles of dance, and their relationships to other art forms.

0101	Shawn Stone TuTh 12:30pm - 1:45pm	Seats (Total: 25) KNI 1103
0201	Renee Gerardo TuTh 2:00pm - 3:15pm	Seats (Total: 25) SKN 1115
0301	Kristina Harris TuTh 11:00am - 12:15pm	Seats (Total: 25) SKN 1115

0401	Christine Hands	Seats (Total: 20)	
	MW 12:30pm - 1:45pm	JMZ 2207	
	This section will focus on inclusitify/diability works.		

DANC207 **Choreography II: The Creative Process**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: DANC109. Restriction: Permission of ARHU-Dance department.

Explorations in movement, music, words, objects, and environments through improvisation and choreographic problem solving.

Students must pay a $25.00 lab fee.

5501	Kendra Portier	Seats (Total: 12)	
	MWF 11:00am - 12:20pm	PAC 1908	Lab

DANC218 **Modern Dance I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Development of heightened body awareness, breath support, dynamic alignment, and spatial awareness. Focus on rhythmic clarity and musicality.

Prerequisite: permission of department.

5501	Adriane Fang	Seats (Total: 15)	
	MWF 9:00am - 10:50am	PAC 1908	Lab

DANC219 **Modern Dance II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Continuation of the elements addressed in DANC218 with an added focus o momentum, the use of counter-tension, stability/mobility, suspension, and dynamic range.

Prerequisite: DANC218 and permission of department.

5501	Adriane Fang	Seats (Total: 16)	
	MWF 9:00am - 10:50am	PAC 1908	Lab

DANC228 **Ballet I**

(Perm req)

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Barre and center work for alignment, strength, flexibility and coordination. Introduction to ballet terminology.

Students must pay a $25.00 lab fee.

5501	Stacey Carlson	Seats (Total: 15)	
	TuTh 11:00am - 12:15pm	PAC 1908	Lab

DANC229 **Ballet II**

(Perm req)

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Continuation of DANC228.

5501	Stacey Carlson	Seats (Total: 15)	
	TuTh 11:00am - 12:15pm	PAC 1908	Lab

DANC299 **Practicum in Choreography, Production and Performance II**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Continuation of DANC199.

Contact department for information to register for this course.

DANC304 **Dance Education I: Foundations**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-Dance department.

Organization and content of the studio dance class. Structuring developmentally appropriate dance experiences for students ages 3-18.

0101	Crystal Davis	Seats (Total: 20)	
	TuTh 2:00pm - 3:15pm	PAC 1908	

DANC318 **Modern Dance III**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Continuation of the elements addressed in DANC219 with an added focus on off-verticality, spirals, complex level changes, more complex and extended phrasing, responsiveness to accompaniment, vocalization.

Prerequisite: DANC219 an permission of department. Students must pay $25 lab fee.

5501	Patrik Widrig	Seats (Total: 10)	
	MWF 12:30pm - 2:20pm	PAC 1908	Lab

DANC319 **Modern Dance IV**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Continuation of the elements addressed in DANC318 with an added focus on movement subtlety and complexity, and stylistic demands.

Prerequisite: DANC318 and permission of department. Students must pay $25 lab fee.

5501	Patrik Widrig	Seats (Total: 10)	
	MWF 12:30pm - 2:20pm	PAC 1908	Lab

DANC328 **Ballet III; Ballet III for Majors**

(Perm req)

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Execution of the vocabulary of ballet movement with technical accuracy.

Students must pay a $25.00 lab fee.

5501	Mané Rebelo-Plaut	Seats (Total: 10)	
	TuTh 12:30pm - 1:45pm	PAC 1908	Lab

DANC329 **Ballet IV; Ballet IV for Majors**

(Perm req)

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Continuation of DANC328.

Students must pay a $25.00 lab fee.

5501	Mané Rebelo-Plaut TuTh 12:30pm - 1:45pm	Seats (Total: 10) PAC 1908	Lab

DANC338A **Global Movement Practices; Afro Jazz**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Movement course. Intermediate level of dances and music of selected world cultures.

Students must pay a $25.00 lab fee.

5501	Ronya Anderson TuTh 12:30pm - 1:45pm	Seats (Total: 25) PAC 1912

DANC338C **Global Movement Practices; Chinese Dance**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Movement course. Intermediate level of dances and music of selected world cultures.

5501	Xinran Qi TuTh 12:30pm - 1:45pm	Seats (Total: 30) PKT 2102

DANC338P **Global Movement Practices; Advanced Hip Hop**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Movement course. Intermediate level of dances and music of selected world cultures.

5501	Ama Law TuTh 3:30pm - 4:45pm	Seats (Total: 20) PAC 1912

DANC379 **Practicum in Dance**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Performing experience for the student dancer who has developed a professional level of competence.

Contact department for information to register for this course.

DANC383 **Dance History & Theory**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-Dance department. Credit only granted for: DANC283 or DANC383. Formerly: DANC283.

With a primary focus on Western concert dance from the 20th and 21st centuries, this course proposes an understanding of dance as it is situated in historical and cultural contexts. Rather than proposing a canon of "masterworks", this course interrogates choreography and other dance practices from multiple perspectives such as feminist theories, race, gender, and sexuality studies.

0101	Maura Keefe TuTh 9:30am - 10:45am	Seats (Total: 15) PAC 1815

DANC398 **Directed Studies in Dance**

(Perm req)

Credits: 1-6

Grading Method: Regular, Pass-Fail, Audit

0101	Patrik Widrig Contact instructor or department for details.	Seats (Total: 10)
0201	Sara Pearson Contact instructor or department for details.	Seats (Total: 10)
0301	Maura Keefe Contact instructor or department for details.	Seats (Total: 10)
0401	Alvin Mayes Contact instructor or department for details.	Seats (Total: 10)
0501	Paul Jackson Contact instructor or department for details.	Seats (Total: 10)
0701	Crystal Davis Contact instructor or department for details.	Seats (Total: 10)
0801	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
1001	Adriane Fang Contact instructor or department for details.	Seats (Total: 10)

DANC398Y **Directed Studies in Dance; Movement, Mindfulness, and Self Awareness**

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

This course will use yogic asana practices and modern dance improvisational structures to foster a body-mind centering environment where students will explore philosophical concepts and discover new methods of problem-solving. Students must pay a $25.00 lab fee.

5501	Heidi McFall	Seats (Total: 25)	
	TuTh 3:30pm - 4:45pm	PKT 2102	

DANC399 **Practicum in Choreography, Production and Performance III**

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Continuation of DANC299.

Contact department for information to register for this course.

DANC448 **Modern Dance V**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Complex phrases of modern dance movement with emphasis on articulation and expression.

Prerequisite: DANC319 and audition. Students must pay a $25.00 lab fee.

5501	Kendra Portier	Seats (Total: 10)	
	MWF 9:00am - 10:50am	PAC 1912	Lab

DANC449 **Modern Dance VI**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Continuation of DANC448.

Prerequisite: DANC448. Students must pay a $25.00 lab fee.

5501	Kendra Portier	Seats (Total: 6)	
	MWF 9:00am - 10:50am	PAC 1912	Lab

DANC468 **Dance Repertory**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Form, content, music, design and performance of modern dance works.

Students must pay a $25.00 lab fee.

5501	Adriane Fang	Seats (Total: 12)
	MW 3:30pm - 5:30pm	PAC 1912

DANC479 **Advanced Practicum in Dance**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Advanced level performing experience for the student dancer who has developed an advanced professional level of competence.

Contact department for information to register for this course.

DANC488 **Project-Based Learning; Project-Based Learning**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A specific project, is addressed, in dance from the perspectives of the investigator, the creator/choreographer, and the performer. Projects are cross-disciplinary and/or cross-cultural, and may involve both on- and off-campus experiences.

Students must pay a $25.00 lab fee.

5501	Paul Jackson	Seats (Total: 15)
	MW 2:30pm - 4:15pm	PAC 1908

DANC499 **Practicum in Choreography, Production and Performance IV**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Advanced workshop in dance presentation, including performing, production and planned field experiences.

Contact department for information to register for this course.

DANC611 **Dance Technology and Media**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Project-based development of media and technological support for dance performance, archiving, and portfolio design, development and implementation.

Students must pay a $25.00 lab fee.

5501	Paul Jackson MW 12:00pm - 1:15pm	Seats (Total: 5) PAC 1610

DANC647 **Dance and Movement Practice**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Experiential studio work that generates common movement vocabulary and innovations of same in a shared, faculty-led exploration of movement for the purpose of generating vocabulary for technique, choreography, and pedagogy.

5501	Sara Pearson Contact instructor or department for details.	Seats (Total: 5)
5502	Patrik Widrig Contact instructor or department for details.	Seats (Total: 5)
5504	Alvin Mayes Contact instructor or department for details.	Seats (Total: 5)
5507	Crystal Davis Contact instructor or department for details.	Seats (Total: 5)
5508	Adriane Fang Contact instructor or department for details.	Seats (Total: 5)
5510	Maura Keefe Contact instructor or department for details.	Seats (Total: 5)

DANC678 **Individual Movement Practice**

Credits: 2 Grading Method: Regular

Students in consultation with the adviser, propose a specific movement practice and can select the practice from the range of technique offerings in the program. Additional work in documenting and providing evidence of growth towards individual outcomes is required.

0101	Patrik Widrig Contact instructor or department for details.	Seats (Total: 5)
0201	Sara Pearson Contact instructor or department for details.	Seats (Total: 5)
0301	Maura Keefe Contact instructor or department for details.	Seats (Total: 5)
0401	Alvin Mayes Contact instructor or department for details.	Seats (Total: 5)
0601	Kendra Portier Contact instructor or department for details.	Seats (Total: 5)
0701	Crystal Davis Contact instructor or department for details.	Seats (Total: 5)
0801	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
1001	Adriane Fang Contact instructor or department for details.	Seats (Total: 5)

DANC679 **Graduate Dance Performance**

Credits: 1-3 Grading Method: Regular, Audit

An advanced performance course focusing on the restagings from noted scores of the choreographic works of significant artists in the field.

0101	Patrik Widrig Contact instructor or department for details.	Seats (Total: 2)
0201	Sara Pearson Contact instructor or department for details.	Seats (Total: 2)
0301	Maura Keefe Contact instructor or department for details.	Seats (Total: 2)
0401	Alvin Mayes Contact instructor or department for details.	Seats (Total: 2)

0501	Paul Jackson Contact instructor or department for details.	Seats (Total: 2)
0601	Kendra Portier Contact instructor or department for details.	Seats (Total: 2)
0701	Crystal Davis Contact instructor or department for details.	Seats (Total: 2)
0801	Instructor: TBA Contact instructor or department for details.	Seats (Total: 2)
1001	Adriane Fang Contact instructor or department for details.	Seats (Total: 2)

DANC689D **Special Topics in Dance; Dance Pedagogy-Dance History**

Credits: 1 Grading Method: Regular, Audit

Special Topics in dance theory, research or creative projects.

0101	Maura Keefe TuTh 9:30am - 10:45am	Seats (Total: 4) PAC 1815

DANC689M **Special Topics in Dance; Advanced Modern Technique I**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Special Topics in dance theory, research or creative projects.

Students must pay a $25 lab fee.

0101	Patrik Widrig Contact instructor or department for details.	Seats (Total: 1)
5501	Kendra Portier MWF 9:00am - 10:50am	Seats (Total: 5) PAC 1912

DANC689T **Special Topics in Dance; Advanced Modern Technique II**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Special Topics in dance theory, research or creative projects.

Students must pay a $25 lab fee.

5501	Kendra Portier MWF 9:00am - 10:50am	Seats (Total: 5) PAC 1912

DANC698 **Independent Study in Dance**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Directed independent study in theoretical topics.

0101	Patrik Widrig Contact instructor or department for details.	Seats (Total: 5)
0201	Sara Pearson Contact instructor or department for details.	Seats (Total: 3)
0301	Maura Keefe Contact instructor or department for details.	Seats (Total: 3)
0401	Alvin Mayes Contact instructor or department for details.	Seats (Total: 3)
0501	Paul Jackson Contact instructor or department for details.	Seats (Total: 3)
0601	Kendra Portier Contact instructor or department for details.	Seats (Total: 3)
0701	Crystal Davis Contact instructor or department for details.	Seats (Total: 5)
1001	Adriane Fang Contact instructor or department for details.	Seats (Total: 3)

DANC698T **Independent Study in Dance; Creative Ambiguities: Embodiment, Text, and the Digital Humanities**

Credits: 3 Grading Method: Regular, Audit

Directed independent study in theoretical topics.

Prerequisite: MITH610; or permission of instructor. Also offered as MITH741 and THET669T. Credit only granted for MITH741, THET669T, or DANC698T.

0101	Susan Wiesner	Seats (Total: 20)
	Tu 2:00pm - 4:50pm	HBK 3101

DANC708 **Choreography and Collaboration; Collaborative Work**

Credits: 3 Grading Method: Regular, Audit

Collaborative work across disciplines and genres.

Students must pay a $25.00 lab fee.

5501	Sara Pearson	Seats (Total: 5)
	MW 1:30pm - 2:50pm	PAC 1610

DANC766 **Graduate Movement Observation and Analysis**

Credits: 2 Grading Method: Regular, Audit

Restriction: Must be admitted to MFA in Dance; or permission of ARHU-School of Theatre, Dance & Performance Studies department.

Aspects of cultural and nonverbal analysis, developmental movement, kinesiological analysis, Laban Movement Analysis, with the goal of developing the student/teacher's ability to observe macro and micro levels of detail.

5501	Crystal Davis	Seats (Total: 5)
	MW 3:00pm - 4:15pm	PAC 1611

DANC777 **Internship in Dance**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Restriction: Must be admitted to MFA in Dance; or permission of ARHU-School of Theatre, Dance & Performance Studies department.

Internship in dance advocacy, administration, education, community building, choreography, or performance with an agency off campus and with a national or international profile.

0701	Crystal Davis	Seats (Total: 5)
	Contact instructor or department for details.	

DANC788 **Master's Tutorial for Choreography**

Credits: 1-3 Grading Method: Regular, Audit

Supervised production and presentation of a significant choreographic project.

0101	Patrik Widrig Contact instructor or department for details.	Seats (Total: 5)
0201	Sara Pearson Contact instructor or department for details.	Seats (Total: 5)
0301	Maura Keefe Contact instructor or department for details.	Seats (Total: 5)
0401	Alvin Mayes Contact instructor or department for details.	Seats (Total: 5)
0501	Paul Jackson Contact instructor or department for details.	Seats (Total: 5)
0601	Kendra Portier Contact instructor or department for details.	Seats (Total: 5)
0701	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
1001	Adriane Fang Contact instructor or department for details.	Seats (Total: 5)

DANC789 **Directed Study in Dance Theory; Directed Study in Dance Theory**

Credits: 2-6 Grading Method: Regular, Audit

Advanced directed study in dance history, theory or criticism culminating in a paper for presentation or publication.

0101	Patrik Widrig Contact instructor or department for details.	Seats (Total: 6)
0201	Sara Pearson Contact instructor or department for details.	Seats (Total: 6)

0301	Maura Keefe Contact instructor or department for details.	Seats (Total: 6)
0401	Alvin Mayes Contact instructor or department for details.	Seats (Total: 6)
0501	Paul Jackson Contact instructor or department for details.	Seats (Total: 6)
0601	Kendra Portier Contact instructor or department for details.	Seats (Total: 6)
0701	Crystal Davis Contact instructor or department for details.	Seats (Total: 6)
0801	Instructor: TBA Contact instructor or department for details.	Seats (Total: 6)
0901	Instructor: TBA Contact instructor or department for details.	Seats (Total: 6)
1001	Adriane Fang Contact instructor or department for details.	Seats (Total: 6)
1601	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)

DANC799 **Master's Thesis Project**

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

EALL East Asian Languages and Literatures Spring 2019

EALL300 **The Languages of East Asia**

Credits: 3 Grading Method: Regular , D General Education: DVUP

A survey of Chinese, Japanese, and Korean, and the languages of other East Asian nationalities. Provides a basic understanding of the structures of these languages. Topics covered include the characterizing features; the relationships of the languages to each other; the geographical, social, and historical settings. No knowledge of Asian languages is required. Taught in English.

This course satisfies one general elective requirement for the JAPN major.

0101	Samuel Ramsey MW 3:30pm - 4:45pm	Seats (Total: 30) JMZ 2206	

ECON Economics Spring 2019

ECON181 **Putting a Price on the Environment: An Economist's Perspective on Sustainability**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

How does society balance the benefits of environmental protection and preservation against the costs? Though some might say that the environment is priceless, economists recognize that every action involves trade-offs. This course investigates sustainability through comparing costs and benefits. From this perspective, other questions arise: How can we design policies that incentivize sustainable choices? Why might usual market functioning fail to achieve sustainability? Do we need to put a price on the environment in order to protect it? How do we measure an economy's "success"? This course explores the answers to these and other related questions from an economist's perspective.

0101	Erin Moody MW 11:00am - 11:50am F 9:00am - 9:50am	Seats (Total: 30) TWS 0310 LEF 1201	Discussion
0102	Erin Moody MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 30) TWS 0310 LEF 1220	Discussion
0103	Erin Moody MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 30) TWS 0310 LEF 1220	Discussion
0201	Erin Moody MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 30) TWS 0310 LEF 1201	Discussion
0202	Erin Moody MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 30) TWS 0310 LEF 1201	Discussion
0203	Erin Moody MW 12:00pm - 12:50pm F 2:00pm - 2:50pm	Seats (Total: 30) TWS 0310 LEF 1201	Discussion

ECON200 **Principles of Microeconomics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

Prerequisite: MATH107 or MATH110; or must have math eligibility of MATH113 or higher. Credit only granted for: ECON200, AREC240, or AREC250. Additional information: It is recommended that students complete ECON200 before taking ECON201.

Introduces economic models used to analyze economic behavior by individuals and firms and consequent market outcomes. Applies conceptual analysis to several policy issues and surveys a variety of specific topics within the broad scope of microeconomics.

0101	Erin Moody TuTh 11:00am - 12:15pm	Seats (Total: 375) TYD 0130
0201	Erin Moody TuTh 12:30pm - 1:45pm	Seats (Total: 375) TYD 0130

ECON201 **Principles of Macroeconomics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

Prerequisite: MATH107 or MATH110; or must have math eligibility of MATH113 or higher. Recommended: ECON200. Credit only granted for: ECON201 or ECON205.

An introduction to how market economies behave at the aggregate level. The determination of national income/output and the problems of unemployment inflation, will be examined, along with monetary and fiscal policy.

0101	John Neri TuTh 2:00pm - 3:15pm	Seats (Total: 375) TYD 0130
0201	Naveen Sarna TuTh 3:30pm - 4:45pm	Seats (Total: 375) TYD 0130

ECON230 **Applied Economic Statistics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have math eligibility of MATH113 or higher; or 1 course with a minimum grade of C- from (MATH107, MATH110). And minimum grade of C- in ECON200 and ECON201. Recommended: Students should already have basic familiarity with Microsoft Excel or similar spreadsheet software. Restriction: Must be in Economics Bachelor of Arts program. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introductory course to develop understanding of statistical concepts used in applied economics. Students will acquire skills needed to calculate and interpret statistical concepts, including descriptive statistics, probability, discrete and continuous distributions, sampling, point and interval estimations, hypothesis testing, basic analysis of variance, and simple linear regression models. Students will apply these concepts to data using both handheld calculators and spreadsheets(Excel), and students will be introduced to an econometric software package such as SPSS or SAS or R.

0101	Satyendra Verma MWF 10:00am - 10:50am	Seats (Total: 40) TYD 1102

ECON305 **Intermediate Macroeconomic Theory and Policy**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of C- in ECON201 and ECON200. And 1 course with a minimum grade of C- from (MATH120, MATH130, MATH136, MATH140); or must have completed MATH220 with a minimum grade of C-. Credit only granted for: ECON305 or ECON325.

Analysis of the determination of national income, employment, and price levels. Discussion of consumption, investment, inflation, and government fiscal and monetary policy.

0101	John Neri TuTh 11:00am - 12:15pm	Seats (Total: 220) VMH 1524
0201	Martina Copelman TuTh 9:30am - 10:45am	Seats (Total: 90) TWS 0310
0301	Martina Copelman TuTh 12:30pm - 1:45pm	Seats (Total: 90) TWS 0310

ECON306 **Intermediate Microeconomic Theory & Policy**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: 1 course with a minimum grade of C- from (ECON200, AREC250); and minimum grade of C- in ECON201. And 1 course with a minimum grade of C- from (MATH120, MATH130, MATH136, MATH140); or must have completed MATH220 with a minimum grade of C-. Credit only granted for: ECON306, ECON326, AREC489M, or AREC326.

Analysis of the theories of consumer behavior, producer behavior, different market structures, and various sources of inefficient outcomes. Analysis of microeconomic policies designed to improve market outcomes.

0101	Aaron Finkle TuTh 2:00pm - 3:15pm	Seats (Total: 155) ESJ 2204
0201	Satyendra Verma MWF 12:00pm - 12:50pm	Seats (Total: 155) ESJ 1224
0301	Satyendra Verma MWF 1:00pm - 1:50pm	Seats (Total: 155) ESJ 1224

ECON310 **European Economic History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ECON201 and ECON200.

The evolution of the capitalist system from its medieval origins to the present. Emphasis on dynamic forces of cumulative change in capitalism, including capital accumulation, technology, expansion of markets, the corporate form of private property in the means of production, and the relation of capitalism to war and revolution.

Contact department for information to register for this course.

ECON311 **American Economic History Before the Civil War**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Restriction: Must be in Economics Bachelor of Arts program.

Economic concepts are used to analyze various aspects of the founding and early history of the U.S., including the British settlement of the North American colonies, the economics of the American Revolutionary war, the writing of the Constitution, the development of financial markets, policies on public lands and the spread of western agriculture, slavery, banking, and early industrialization.

0101	John Wallis TuTh 11:00am - 12:15pm	Seats (Total: 180) LEF 2205

ECON312 **American Economics After the Civil War**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Restriction: Must be in Economics Bachelor of Arts program.

Topics include: the economics of the Civil War, the performance of southern agriculture in the late 19th century, the rise of large corporations, industrialization, the development of financial markets, the creation of the Federal Reserve Board, the economics of the Great Depression and the New Deal, the economic impact of World War II, and the rise of the modern service economy in the late 20th century.

0101	Alka Gandhi	Seats (Total: 38)
	MWF 1:00pm - 1:50pm	TYD 1118

ECON314 **Economic History, Development and Policy**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ECON200 and ECON201.

Study abroad in the economic history, institutional development, and recent economic policy problems of selected areas.

Contact department for information to register for this course.

ECON315 **Economic Development of Underdeveloped Areas**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Credit only granted for: ECON315 or ECON416.

Analysis of the economic and social characteristics of underdeveloped areas. Recent theories of economic development, obstacles to development, policies and planning for development.

0101	Stefania Scandizzo	Seats (Total: 38)
	MWF 10:00am - 10:50am	TYD 0101

ECON317 **Global Economic Policies**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Restriction: Must be in Economics Bachelor of Arts program.

Analysis of policy options and debates on fostering economic growth and development in a global economy where national boundaries are no longer relevant. Topics covered will include real loanable funds markets in both local and international contexts during normal conditions and during financial crises, the design of trade and industrial policies, and the role of the World Bank, IMF, WTO, and other international agencies as well as regional and bilateral trade agreements. Emerging economies will be emphasized.

0101	Naveen Sarna TuTh 2:00pm - 3:15pm	Seats (Total: 40) TYD 1102
0201	Naveen Sarna TuTh 5:00pm - 6:15pm	Seats (Total: 40) TYD 0111

ECON321 **Economic Statistics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON201 and ECON200; and minimum grade of C- in MATH141. Recommended: STAT100. Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introduction to the use of statistics in economics. Topics include: Probability, random variables and their distributions, sampling theory, estimation, hypothesis testing, analysis of variance, regression analysis and correlation.

0101	Jintae Kim MW 12:30pm - 1:45pm	Seats (Total: 40) TYD 2110

ECON325 **Intermediate Macroeconomic Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200, ECON201, and MATH141. Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: ECON305 or ECON325.

Analysis of macroeconomic behavior and policy with emphasis on theoretical rigor. Topics include the determinants of economic growth, unemployment, inflation, and international economic flows.

0101	L Stevens MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 30) JMZ 0220 TYD 2111	Discussion
0102	L Stevens MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 30) JMZ 0220 TYD 2111	Discussion
0103	L Stevens MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 30) JMZ 0220 TYD 2111	Discussion

ECON326 **Intermediate Microeconomic Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200, ECON201, and MATH141. Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: ECON306, ECON326, AREC326, or AREC489M.

Analysis of economic decision-making by individual buyers and sellers, and resulting market outcomes, with emphasis on theoretical rigor. The efficient properties of perfect competition are examined, followed by consideration of market power, externalities, and asymmetric information.

0101	Judith Hellerstein MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 30) ESJ 1224 TYD 2109	Discussion
0102	Judith Hellerstein MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 30) ESJ 1224 TYD 1114	Discussion
0103	Judith Hellerstein MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 30) ESJ 1224 TYD 1114	Discussion

ECON330 **Money and Banking**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201.

The structure of financial institutions and their role in the provision of money and near money. Analysis of the Federal Reserve System, the techniques of central banks, and the control of supply of financial assets in stabilization policy. Relationship of money and credit to economic activity and the price level.

0101	John Neri	Seats (Total: 300)
	TuTh 9:30am - 10:45am	TYD 0130

ECON340 **International Economics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Credit only granted for: ECON340 or ECON441.

Introduces economic models of international trade and finance. Analyzes policies designed to promote and restrict international trade and to manage exchange rates and impact international capital flows.

Contact department for information to register for this course.

ECON358A **Special Topics in Study Abroad III; Argentine Economy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ECON358E **Special Topics in Study Abroad III; Environmental Economics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ECON358T **Special Topics in Study Abroad III; Behavior and Incentives in Economics: The Case of Soccer**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ECON386 **Experiential Learning**

(Perm req)

Credits: 3 Grading Method: Sat-Fail

Prerequisite: ECON201 and ECON200. Restriction: Permission of BSOS-Economics department; and must be in a major within the BSOS-Economics department; and minimum cumulative GPA of 2.5; and junior standing or higher.

See Department Advising Office for course eligibility, course requirements, and application information.

Contact department for information to register for this course.

ECON387 **Career Preparation for Economics Majors**

Credits: 2 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from ECON400-499 course range. Restriction: Must be in one of the following programs (Economics Bachelor of Arts; Economics Bachelor of Science).

Increase student knowledge of career paths, job search tools, and strategies for successfully obtaining a job with a BA or BS in economics. Students will engage in a range of different activities which build their understanding of job opportunities in economics and hone their abilities to find positions they want. Students will reflect on specific skills employers seek from economics graduates and incorporate that knowledge in their own individual job search and career plan.

0101	Stefania Scandizzo **Meets January 28, 2019 - March 16, 2019** F 1:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 20) TYD 0111 ONLINE	 Discussion
0201	Stefania Scandizzo **Meets March 17, 2019 - May 14, 2019** F 1:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 20) TYD 0111 ONLINE	 Discussion

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ECON397 **Honors Thesis**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ECON396. Restriction: Must be a candidate for honors in economics.

General supervision will be provided through assembled meetings with the professor in charge of the course.

0101	Nolan Pope TuTh 9:30am - 10:45am	Seats (Total: 15) TYD 1108	

ECON398E **Topics in Economics; Environmental Economics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This course is designed to meet the changing interests of students and staff. Topics vary in response to those interests. Students are advised to seek information about the coverage and prerequisites during the registration period.

Credit granted for only one of the following: ECON381,ECON398E, or ECON481.

Contact department for information to register for this course.

ECON398H **Topics in Economics; UK Economy & Financial Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This course is designed to meet the changing interests of students and staff. Topics vary in response to those interests. Students are advised to seek information about the coverage and prerequisites during the registration period.

Contact department for information to register for this course.

ECON398K **Topics in Economics; Competitive Market Structures**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This course is designed to meet the changing interests of students and staff. Topics vary in response to those interests. Students are advised to seek information about the coverage and prerequisites during the registration period.

Prerequisite: ECON200.

Contact department for information to register for this course.

ECON398L **Topics in Economics; The British Economy and Financial System**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This course is designed to meet the changing interests of students and staff. Topics vary in response to those interests. Students are advised to seek information about the coverage and prerequisites during the registration period.

Contact department for information to register for this course.

ECON398M **Topics in Economics; Economics of Employment**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This course is designed to meet the changing interests of students and staff. Topics vary in response to those interests. Students are advised to seek information about the coverage and prerequisites during the registration period.

Prerequisites: ECON200 and ECON201.

Contact department for information to register for this course.

ECON398Z **Topics in Economics; Business Economics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This course is designed to meet the changing interests of students and staff. Topics vary in response to those interests. Students are advised to seek information about the coverage and prerequisites during the registration period.

Contact department for information to register for this course.

ECON399 **Independent Study in Economics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Integrated readings and independent study under direction and supervision of a faculty member. Contact department for additional information.

Permission of instructor must be arranged in advance. Open only to students who have previously earned 6 or more credits in upper division economics courses.

Contact department for information to register for this course.

ECON399M **Independent Study in Economics; Economy and Society**

Credits: 1-3 Grading Method: Regular, Pass-Fail

Integrated readings and independent study under direction and supervision of a faculty member. Contact department for additional information.

Contact department for information to register for this course.

ECON401 **Current Issues in American Economic Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON424, ECON422). Restriction: Must be in Economics Bachelor of Arts program.

Analysis of current economic problems and public policies. Topics could include poverty, income inequality, social insurance, education, environmental sustainability, immigration, and innovation. Other issues may be substituted depending on current events.

0101	Erin Moody TuTh 9:30am - 10:45am	Seats (Total: 25) TYD 1118
0201	Daniel Kolliner TuTh 2:00pm - 3:15pm	Seats (Total: 25) TYD 1118
0301	Thomas Hegland MW 5:00pm - 6:15pm	Seats (Total: 25) TYD 2110

ECON402 **Macroeconomic Models and Forecasting**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program.

Analysis of the fluctuations in economic activity and the formulation and use of forecasting models of the economy. Illustrations of computer macro models and forecasting problems.

0101	Gonzalo Garcia TuTh 3:30pm - 4:45pm	Seats (Total: 30) TYD 2102

ECON406 **Advanced Microeconomics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON326; and 1 course with a minimum grade of C- from (ECON321, STAT400). Restriction: Must be in Economics Bachelor of Science program.

Expands on the assumptions of rational decision-making used in intermediate microeconomics and develops more complicated, more realistic models which address uncertainty, intertemporal choices, strategic interactions, social preferences and considerations of what is fair.

0101	Yusuf Masatlioglu TuTh 12:30pm - 1:45pm	Seats (Total: 70) TYD 1102

ECON407 **Advanced Macroeconomics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON325; and 1 course with a minimum grade of C- from (ECON321, STAT400). Restriction: Must be in Economics Bachelor of Science program.

An in-depth analysis of current issues in macroeconomic theory and policy. Topics covered include: 1. alternative perspectives on macroeconomics including monetarism, new classical equilibrium models, rational expectations, and real business cycle models; 2. long term growth, the slowdown in productivity growth, and concerns about U.S. competitiveness; 3. the effectiveness of macroeconomic policy in an open economy; 4. the effects of finance on the real sector.

0101	Martina Copelman TuTh 2:00pm - 3:15pm	Seats (Total: 70) ASY 2203

ECON414 **Game Theory**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321, STAT400). Restriction: Must be in one of the following programs (Economics Bachelor of Arts; Economics Bachelor of Science). Credit only granted for: CMSC474, ECON414, GVPT399A or GVPT390.

Studies the competitive and cooperative behavior that results when several parties find that their individual outcomes are jointly determined. Students will learn how to use game theory to analyze situations of potential conflict. Applications are drawn from economics, business, and political science.

0101	Nebahat Erturk TuTh 11:00am - 12:15pm	Seats (Total: 38) TYD 1102
0201	Elif Osun TuTh 5:00pm - 6:15pm	Seats (Total: 38) TYD 1132

ECON416 **Analysis of Economic Development**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON325, ECON326, and ECON422. Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: ECON315 or ECON416.

Analysis of the determinants and influences on economic development. Emphasis on both theoretical models and econometric methods of explaining why some countries are poor, along with examination of policies to promote development.

0101	Sebastian Galiani MW 9:30am - 10:45am	Seats (Total: 25) TYD 2111
0201	Sebastian Galiani MW 2:00pm - 3:15pm	Seats (Total: 25) TYD 0111

ECON418L **Economic Development of Selected Areas; Latin America**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Economic and institutional characteristics of a specific geographic area are identified and discussed, and alternate strategies and policies for development are analyzed.

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in the Economics Bachelor of Arts program. Using examples from different historical and geographic contexts, students will analyze both the diversity and the commonalities of economic outcomes in Latin America, with an emphasis on institutional patterns. The class analyzes the divergence between North America and Latin America since the 1700s; surveys Latin America's economic history; reviews the regions recent economic experience with macroeconomic crises and their interaction with the political sphere; and explores current topics in the regions economic development, like the war on drugs and the rise of leftist policies.

0101	Mateo Uribe-Castro MWF 11:00am - 11:50am	Seats (Total: 38) TYD 0101

ECON418M **Economic Development of Selected Areas; Middle East**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Economic and institutional characteristics of a specific geographic area are identified and discussed, and alternate strategies and policies for development are analyzed.

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON306, ECON325, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program. Analyzes patterns of economic and institutional development in the Middle East; assesses the general trends in economic growth, investment, and institutional changes; and examines specific issues such as population and human development, economics and politics of oil and trade, the structure of state and its role in economic development, financial markets and Islamic banking, and business environment.

0101	Hossein Abbasi TuTh 12:30pm - 1:45pm	Seats (Total: 38) TYD 2111

ECON422 **Econometrics I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON325, ECON326); and 1 course with a minimum grade of C- from (STAT400, ECON321). Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: ECON422, ECON424, AREC422, or AREC489F.

Emphasizes the interaction between economic problems and the assumption employed in statistical theory. Formulation, estimation, and testing of economic models, including single variable and multiple variable regression techniques, theory of identification, and issues relating to inference.

0101	Alka Gandhi MWF 10:00am - 10:50am	Seats (Total: 38) TYD 2102
0201	Alka Gandhi MWF 11:00am - 11:50am	Seats (Total: 38) TYD 2102

ECON423 **Econometrics II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON422. Restriction: Must be in Economics Bachelor of Science program.

Interaction between economic problems and specification and estimation of econometric models. Topics include issues of autocorrelation, heteroscedasticity, functional form, simultaneous equation models, qualitative choice models, and other computational methods.

0101	John Chao TuTh 9:30am - 10:45am	Seats (Total: 38) TYD 2102
0201	Richard Stahnke MW 12:30pm - 1:45pm	Seats (Total: 38) TYD 2111

ECON424 **Applied Econometrics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON306, ECON325, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program. Credit only granted for: ECON422 or ECON424.

Provide the knowledge and skills necessary to accomplish and utilize basic applied econometric analysis utilized by many business service providers, government agencies, and nonprofits engaged in policy analysis. Topics include simple and multiple regressions using cross section, time series, and panel data, issues of heteroskedasticity, serial correlation, and multicollinearity, models with binary dependent variable, and program evaluation. Course emphasizes application of knowledge using software packages but still covers essential theoretical background.

0101	Hossein Abbasi TuTh 9:30am - 10:45am	Seats (Total: 38) TYD 2111
0201	Hossein Abbasi TuTh 11:00am - 12:15pm	Seats (Total: 38) TYD 2111
0301	Fo Aflagah MW 3:30pm - 4:45pm	Seats (Total: 38) TYD 2111
0401	Yue Chao TuTh 5:00pm - 6:15pm	Seats (Total: 38) TYD 2102

ECON426 **Economics of Cost-Benefit Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON306, ECON325, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program.

Study of how to use cost benefit analysis and other similar tools of applied microeconomics to conduct policy analyses. Cost-benefit analysis is an empirical method of identifying an optimal choice from a set of policy alternatives, where optimal is defined in terms of economic efficiency. Real world examples are addressed, so that students understand limitations of the methods and also interactions of economic analysis with political and administrative processes.

0101	Ephraim Leibtag Tu 6:15pm - 8:45pm	Seats (Total: 25) TYD 2111
0201	Olga Fetisova-Canas MW 2:00pm - 3:15pm	Seats (Total: 25) TYD 2111
0301	Gentry Johnson MW 5:00pm - 6:15pm	Seats (Total: 25) TYD 2111

ECON427 **Experimental Economics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON326; and 1 course with a minimum grade of C- from (ECON321, STAT400). Restriction: Must be in Economics Bachelor of Science program.

An introduction to the methodology of experimental economics and its application to issues such as decision-making under uncertainty, auctions, and public goods. Also an introduction to behavioral economics as a relatively new area of economic research.

0101	Emel Filiz Ozbay TuTh 2:00pm - 3:15pm	Seats (Total: 30) TYD 0102

ECON435 **Financial Markets and the Macroeconomy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program; and must not have completed BMGT343. Credit only granted for: BMGT343 or ECON435. Additional information: Finance majors will not receive credit for ECON435.

The different types of financial assets that exist, the markets that they trade in, and the determination of their prices and rates of return are examined. Specific topics that will be covered include the Markowitz portfolio selection model, the capital asset pricing model, the arbitrage pricing theory, the efficient markets hypothesis, the term structure of interest rates, and options. There will be almost no emphasis on issues in corporate finance.

0101	Can Sever TuTh 3:30pm - 4:45pm	Seats (Total: 38) TYD 2111
0201	Richard Stahnke MW 3:30pm - 4:45pm	Seats (Total: 38) TYD 1114
0301	Richard Stahnke MW 5:00pm - 6:15pm	Seats (Total: 38) TYD 1114

ECON436 **Financial Econometrics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON325 and ECON422. Restriction: Must be in Economics Bachelor of Science program.

An introduction to financial econometrics, which is data science applied to understanding the financial system. Students will learn modern techniques in financial econometrics with an emphasis on the interaction between modeling (theory) and empirical analysis. Topics include relevant economic theory, optimization techniques, probability models, statistical analysis, and use of statistical software.

0101	Jintae Kim MW 3:30pm - 4:45pm	Seats (Total: 25) TYD 2102
0201	Jintae Kim MW 5:00pm - 6:15pm	Seats (Total: 25) TYD 2102

ECON441 **Theory of International Economics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON326 and ECON325. Restriction: Must be in a major within the BSOS-Economics department; and must not have completed ECON340, ECON442, or ECON443. Credit only granted for: ECON340, ECON441, ECON442, or ECON443.

Theoretical treatment of international trade and international finance. Includes Ricardian and Heckscher-Ohlin theories of comparative advantage, analysis of tariffs and other trade barriers, international factor mobility, balance of payments adjustments, exchange rate determination, and fiscal and monetary policy in an open economy.

Contact department for information to register for this course.

ECON442 **Globalization and Capital Markets**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON326 and ECON325; and 1 course with a minimum grade of C- from (ECON321, STAT400). Restriction: Must be in Economics Bachelor of Science program; and must not have completed ECON441. Credit only granted for: ECON441 or ECON442.

Uses models of open-economy macroeconomics to explain the causes and consequences of international capital flows. Analysis is made of private consumption, investment, the government sector, current accounts, the labor market, and the money and foreign exchange markets in small open economies. This framework is then used to study examples of how speculative attacks on currencies, sudden reversals of capital inflows, and the effects of the lack of credibility of economic policy affect economic development.

0101	Sebnem Kalemli-Ozcan Tu 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 20) TYD 0111 ONLINE
0201	Sebnem Kalemli-Ozcan Tu 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 20) TYD 0111 ONLINE

ECON443 **International Trade and Trade Policy in the New Global Economy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program; and must not have completed ECON441. Credit only granted for: ECON441 or ECON443.

Examines the economics of international economic integration, including the theory of customs unions and free trade areas, the role of GATT and the WTO, changes in individual countries' foreign trade policies during the new era of globalization, the special role of multinational firms in world trade, and recent controversies about the benefits and costs of globalized trade.

0101	Stefania Scandizzo MWF 12:00pm - 12:50pm	Seats (Total: 38) TYD 0101

ECON444 **Research in Globalization**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON326 and ECON422. Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: ECON498G or ECON444. Formerly: ECON498G.

As globalization continues, individual countries must confront a variety of related issues including rising inequality, decline of domestic industries, climate change, and disputes over intellectual property rights. Various economic models and research methods will be covered to develop the analytic and empirical skills needed to perform independent research in globalization. Students will prepare literature reviews, conduct preliminary empirical investigations using STATA, and produce well-designed research proposals.

0101	Eunhee Lee MW 11:00am - 12:15pm	Seats (Total: 20) TYD 2111

ECON451 **Public Choice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program.

Analysis of collective decision making, economic models of government, program budgeting, and policy implementation; emphasis on models of public choice and institutions which affect decision making.

0101	Peter Coughlin MWF 10:00am - 10:50am	Seats (Total: 38) TYD 1118
0201	Peter Coughlin MWF 11:00am - 11:50am	Seats (Total: 38) TYD 1118
0301	Peter Coughlin MWF 1:00pm - 1:50pm	Seats (Total: 38) TYD 2102

ECON456 **Law and Economics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program.

Relationship of the exchange process to the system of institutions and rules that society develops to carry out economic transactions. Topics covered include: Property rights; torts, negligence, and liability; contracts and exchanges; criminal control and enforcement; equity and efficiency issues .

0101	Aaron Finkle TuTh 11:00am - 12:15pm	Seats (Total: 43) TYD 1132
0201	Aaron Finkle TuTh 12:30pm - 1:45pm	Seats (Total: 43) TYD 1132

ECON458Q **Special Topics in Study Abroad IV; State and Economy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ECON460 **Industrial Organization**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON326; and 1 course with a minimum grade of C- from (ECON321, STAT400). Restriction: Must be in Economics Bachelor of Science program.

Examines different theoretical models of firm behavior in markets with varying amounts of market power. Relates theory to specific industries and examines how market structure evolves over time.

Contact department for information to register for this course.

ECON463 **Economics of Sports**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321, STAT400). Restriction: Must be in Economics Bachelor of Arts program.

The application of theoretical and empirical economic tools to the sports industry, including competition at professional,collegiate, and international levels. Microeconomic models from labor, industrial organization and public finance will be applied to the sports industry and combined with data from sports markets, providing students with opportunities to produce and interpret economic analysis. The topic of discrimination will also be explored in the context of this particular economic activity.

0101	Nicholas Montgomery MWF 9:00am - 9:50am	Seats (Total: 30) TYD 1132
0201	Nicholas Montgomery MWF 10:00am - 10:50am	Seats (Total: 30) TYD 1132

ECON470 **Labor Economics:Theory and Evidence**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON326; and 1 course with a minimum grade of C- from (ECON321, STAT400). Restriction: Must be in Economics Bachelor of Science program.

An analytical treatment of theories of labor markets, and an examination of empirical findings, evidence and conclusions. Topics covered will include some or all of the following: labor demand; labor supply and labor market participation; theory of human capital; earnings differentials; and if time allows, market structure and the efficiency of labor markets; and unemployment.

0101	Judith Hellerstein	Seats (Total: 34)
	MW 2:00pm - 3:15pm	TYD 1114

ECON471 **Labor Markets**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and minimum grade of C- in ECON424. Restriction: Must be in Economics Bachelor of Arts program. Credit only granted for: ECON470 or ECON471.

Central topics include the determinants of firms' demand for labor and households' decision making about whether to work, how much to work, and where to work. We will then study the equilibrium amount of labor hired in society and the wages paid to workers. The course will also include the measurement of the labor market, human capital, discrimination, incentives, and current changes in the American economic landscape. Various economic policies impacting labor markets will be analyzed.

0101	Nicholas Montgomery	Seats (Total: 38)
	MW 2:00pm - 3:15pm	TYD 1118

ECON481 **Environmental Economics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, ECON321, BMGT230). Restriction: Must be in Economics Bachelor of Arts program. Credit only granted for: ECON481 or AREC481.

An exploration of the use of economic incentives for protection of the environment and the determination of appropriate (or efficient) level of environmental quality. Also covers the choice of policy instruments for the attainment of environmental standards.

0101	Roberton Williams	Seats (Total: 40)
	TuTh 9:30am - 10:45am	SYM 0200

ECON488C **Applied Market Research Practicum; FLOAT Service Learning**

(Perm req)

Credits: 2 Grading Method: Sat-Fail

Students gain experience applying economic knowledge and producing research valued by businesses, non-profits, and/or government agencies. Students engage in activities similar to what an intern or entry-level employee would perform. Students work in small groups to find different kinds of data and facts, analyze and interpret this information, and use research findings to develop and present recommendations for simulated clients.

This course is part of the Financial Literacy Outreach and Training (FLOAT) program. Permission to enroll based on successful completion of ECON488L.

0101	Cindy Clement Th 6:00pm - 7:00pm Contact instructor or department for details.	Seats (Total: 20) TYD 1108

ECON488K **Applied Market Research Practicum; Kaulkin Ginsberg Research Fellow**

(Perm req)

Credits: 2 Grading Method: Sat-Fail

Students gain experience applying economic knowledge and producing research valued by businesses, non-profits, and/or government agencies. Students engage in activities similar to what an intern or entry-level employee would perform. Students work in small groups to find different kinds of data and facts, analyze and interpret this information, and use research findings to develop and present recommendations for simulated clients.

Permission for this practicum is based on an approved application. For more information about course requirements and application please contact ECON Advising.

0101	Aaron Finkle, Jared Lese M 5:30pm - 7:30pm Contact instructor or department for details.	Seats (Total: 16) TYD 1118

ECON488W **Applied Market Research Practicum; Wealth Management Fundamentals**

(Perm req)

Credits: 2 Grading Method: Sat-Fail

Students gain experience applying economic knowledge and producing research valued by businesses, non-profits, and/or government agencies. Students engage in activities similar to what an intern or entry-level employee would perform. Students work in small groups to find different kinds of data and facts, analyze and interpret this information, and use research findings to develop and present recommendations for simulated clients.

Permission for this practicum is based on an approved application. For more information about course requirements and application please contact ECON Advising.

0101	John Neri Th 5:00pm - 7:00pm Contact instructor or department for details.	Seats (Total: 20) TYD 2106

ECON499 **Independent Research in Economics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Directed research under the supervision of a faculty member. Contact department for additional information.

Contact department for information to register for this course.

ECON602 **Macroeconomic Analysis II**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON601; or permission of BSOS-Economics department.

Further issues regarding macroeconomic topics. First half emphasis will be placed on dynamic macroeconomic theory as pertaining to monetary issues, policy ineffectiveness and effectiveness. The second half of the course will focus on theories of investment and growth.

0101	Sadik Aruoba, John Haltiwanger	Seats (Total: 48)	
	MW 9:30am - 10:45am	TYD 1101	
	M 5:00pm - 6:45pm	TYD 1101	Discussion

ECON604 **Microeconomic Analysis II**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603. Restriction: Permission of BSOS-Economics department.

Analysis of markets and market equilibria; the Arrow-Debreu model of general equilibrium, the two-sector model, welfare theorems, externalities, public goods, markets with incomplete and asymmetric information.

0101	Erkut Ozbay, Daniel Vincent	Seats (Total: 45)	
	TuTh 2:00pm - 3:15pm	TYD 2102	
	F 3:00pm - 4:15pm	TYD 2106	Discussion

ECON611 **Seminar in American Economic Development**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of BSOS-Economics department.

Selected topics in the long-term movements of the American economy. Quantitative studies of the growth of output; applications of econometric methods and economic theory to topics in American economic history.

0101	John Wallis	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	LEF 1222

ECON615 **Development Economics I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603; or permission of BSOS-Economics department.

Explore both the causes and consequences in development economics from a historical and scientific approach. Presents theoretical models and applied work that test alternative hypotheses. Explore models of economic growth and institutions, with emphasis on property rights and political regimes as causal factors affecting development. Discuss empirical methods widely used in the field and important related topics including poverty, inequality, education and health.

0101	Sebastian Galiani	Seats (Total: 15)
	MW 11:00am - 12:15pm	KEY 0124

ECON624 **Econometrics II**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON623; or permission of BSOS-Economics department.

A continuation of ECON623. Topics include: Nonlinear models and nonlinear estimation methods (generalized method of moments and maximum likelihood estimation), panel data models, univariate dynamic models, multivariate dynamic models including simultaneous equation models, and non-parametric/semiparametric estimation methods. The course will also provide instructions on the use of a major statistical package such as Stata or TSP.

0101	Guido Kuersteiner, Ingmar Prucha	Seats (Total: 30)	
	TuTh 12:30pm - 1:45pm	TYD 0101	
	Th 5:30pm - 7:15pm	TYD 2111	Discussion

ECON625 **Computational Economics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON604 and ECON624. Credit only granted for: ECON625 or ECON698R. Formerly: ECON698R.

An examination of the specification, computation, estimation and interpretation of structural models that are widely used in applied microeconomics (empirical and theoretical Industrial Organization, public and urban economics, environmental economics, development, political economy (e.g., voting), health and education economics, trade) and Marketing. The focus will be on how to use these models in practice, and students will solve and estimate models in weekly problem sets, with solutions/code being discussed in class.

0101	Andrew Sweeting	Seats (Total: 20)
	F 12:30pm - 3:30pm	KEY 0116

ECON636 **Behavioral Economics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603 and ECON604; and permission of BSOS-Economics department.

An exploration of how people make decisions, questioning the concept of "perfect rationality" in the standard economic theory, providing improved models in line with the observed biases of decision makers. Focusing on decision making under risk and ambiguity, endowment effect, status quo bias, loss aversion, intertemporal choice, and selfish and pro-social preferences.

0101	Emel Filiz Ozbay	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	TYD 0101

ECON637 **Decision Theory**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603 and ECON604. Restriction: Must be in the Economics program; or must have completed ECON603 and ECON604 with a letter grade of B+ or better. Credit only granted for: ECON698B or ECON637. Formerly: ECON698B.

Decision making is a process in which we select a course of action among available options. This course will explore the various behavioral biases observed in decision making processes by adjusting our normative theories to capture these biases.

0101	Yusuf Masatlioglu	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	TYD 0111

ECON641 **Microeconomic Analysis**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in M.Prof.Studies: Applied Economics program; or permission of BSOS-Economics department. Credit only granted for: ECON641 or ECON506. Formerly: ECON506.

Microeconomic analysis applied to public policy problems with an emphasis on practical examples and how they illustrate microeconomic theories. Policy issues such as pollution, welfare and income distribution, market design, industry regulation, price controls, tax policy and health insurance are practical examples used to illustrate the abstract principles of microeconomics.

Must be in Applied Economics-WDC Program; for permission to enroll, contact oes@umd.edu.

Click here for more course information.

PR01	Aaron Finkle	Seats (Total: 23)	
	Meets February 25, 2019 - May 17, 2019		
	Tu 6:45pm - 9:30pm Class time/details on ELMs	Location: TBA ONLINE	Discussion
	Class meets at 1400 16th St, NW, Washington, DC.		

ECON643 **Empirical Analysis I: Foundations of Empirical Research**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ECON643 or ECON521. Formerly: ECON521.

Fundamental aspects of data management and interpretation emphasizing sampling, descriptive statistics, index numbers and construction of aggregated variables. Students will learn probability theory, confidence intervals, hypothesis testing and regression analysis using the EXCEL spreadsheet program and STATA statistical software.

Must be in Applied Economics-WDC Program; for permission to enroll, contact oes@umd.edu.

Click here for more course information.

PR01	John Straub	Seats (Total: 23)	
	Meets February 25, 2019 - May 17, 2019		
	W 6:45pm - 9:30pm Class time/details on ELMs	Location: TBA ONLINE	Discussion
	This course meets at 1400 16th Street NW, Washington D.C., Suite 140.		

ECON644 **Empirical Analysis II: Introduction to Economic Models**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON643.

An introduction to econometric methods with applications to public policy analysis. Primary focus on application and interpretation of multiple regression analysis.

Must be in Applied Economics-UMCP program; for permission to enroll, contact oes@umd.edu.

Click here for more course information.

PCE1	Hossein Abbasi	Seats (Total: 30)
	W 6:30pm - 9:15pm	TYD 2102

ECON645 **Empirical Analysis III: Econometric Modeling and Forecasting**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON644. Credit only granted for: ECON645 or ECON523. Formerly: ECON523.

Study of empirical techniques that are particularly relevant to the analysis of microeconomic models. Emphasis is on advanced panel data methods, time series regressions, instrumental variables, limited dependent variables, and sample selection corrections.

Must be in Applied Economics-WDC Program; for permission to enroll, contact oes@umd.edu.

Click here for more course information.

PR01	Cristina Tello-Trillo	Seats (Total: 23)	
	Meets February 25, 2019 - May 17, 2019		
	W 6:45pm - 9:30pm	Location: TBA	
	Class time/details on ELMs	ONLINE	Discussion
	Class meets at 1400 16th St, NW, Washington, DC.		

ECON670 **Financial Economics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ECON641; and must have completed or be concurrently enrolled in ECON644. Restriction: Must be in M.Prof.Studies: Applied Economics program.

The course applies microeconomic theory and applied econometric techniques to the study of financial institutions and markets for financial assets. Students will learn how economists model and estimate the value of financial assets. The economic and empirical models are of interest to public policy makers and private wealth managers. Specific topics can include financial intermediation, the regulation of financial institutions, risk management, portfolio theory, the capital asset pricing model and the efficient markets hypothesis.

PCE1	Richard Stahnke Tu 6:30pm - 9:15pm	Seats (Total: 30) MOR 1101
	Must be in Applied Economics-UMCP program; for permission to enroll, contact oes@umd.edu.	
PR01	Joonkyu Choi **Meets February 25, 2019 - May 17, 2019** M 6:45pm - 9:30pm Class time/details on ELMs	Seats (Total: 23) Location: TBA ONLINE
	Must be in Applied Economics-WDC Program; for permission to enroll, contact oes@umd.edu. Class meets at 1400 16th Street NW., Washington, DC.	

ECON673 **Information, Game Theory and Market Design**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON641; and must have completed or be concurrently enrolled in ECON644.

A study of the strategic decision-making and the theory and practice of market design. Focus is on the design of organized market and incentives created by market rules. Topics include online auction markets, government auctions procurement auctions and matching markets. The analysis includes documenting the rules of real-world markets, game theoretic analysis, empirical analysis, and experimental work.

Must be in Applied Economics-UMCP program; for permission to enroll, contact oes@umd.edu.

Click here for more course information.

PCE1	David Ovadia Tu 6:30pm - 9:15pm	Seats (Total: 30) TYD 1114

ECON674 **Economic Analysis of Law**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON641; and must have completed or be concurrently enrolled in ECON644.

A study of the application of economics to law with a focus on game theory, strategic behavior and public policy.

PCE1	Michael Barry	Seats (Total: 30)
	Th 6:30pm - 9:15pm	TYD 0101
	Must be in Applied Economics-UMCP program; for permission to enroll, contact oes@umd.edu.	

ECON676 **Economic Development**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON641; and ECON642; and must have completed or be concurrently enrolled in ECON644. Restriction: Must be in M.Prof.Studies: Applied Economics program.

Analysis of economic development. The course will focus on the consequences of poverty and poor institutions for the behavior and welfare of individuals, households, firms and the aggregate economy in developing countries. Theoretical models and empirical evidence will be used to understand the intended and unintended consequences of policies designed to enhance economic development.

PCE1	Bizuayehu Bedane	Seats (Total: 30)
	M 6:30pm - 9:15pm	TYD 0101
	Must be in Applied Economics-UMPC program. For permission to enroll, contact oes@umd.edu.	
PR01	Ervin Dervisevic	Seats (Total: 23)
	Meets February 25, 2019 - May 17, 2019	
	Th 6:45pm - 9:30pm Class time/details on ELMs	Location: TBA ONLINE
	Must be in Applied Economics-WDC Program; for permission to enroll, contact oes@umd.edu. Class meets at 1400 16th Street NW., Washington, DC.	

ECON683 **International Macroeconomics and Finance**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ECON641 and ECON642; and must have completed or be concurrently enrolled in ECON644. Restriction: Must be in M.Prof.Studies: Applied Economics program.

Economic analysis of international macroeconomic issues and policy. Topics can include the study of exchange rates, balance of payments, international financial markets, international business cycles, contagion, and the roles played by international economic institutions.

Must be in Applied Economics-WDC Program; for permission to enroll, contact oes@umd.edu.

Click here for more course information.

PR01	Mahsa Agha Gholizadeh	Seats (Total: 23)
	Meets February 25, 2019 - May 17, 2019	
	M 6:45pm - 9:30pm Class time/details on ELMs	Location: TBA ONLINE
	Class meets at 1400 16th St, NW, Washington, DC.	

ECON684 **Applied Time Series Analysis and Forecasting**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON642; and ECON645. Restriction: Must be in M.Prof.Studies: Applied Economics program.

This course builds on the brief introduction to time series econometrics offered in ECON 645. Students will learn the theory of stationary processes and how it applies to econometric techniques for estimation and forecasting based on time series data. The techniques will be applied in macroeconomic, financial and business applications.

Must be in Applied Economics-UMCP program; for permission to enroll, contact oes@umd.edu.

Click here for more course information.

PCE1	Jintae Kim	Seats (Total: 30)
	W 6:30pm - 9:15pm	TYD 2111

ECON698 **Selected Topics in Economics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

ECON702 **Advanced Macroeconomics II**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON602 and ECON601.

Selected issues in monetary economics with an equal emphasis of learning the models and understanding important issues: a survey of models (cash-in-advance, money-in-the-utility-function, transaction cost, search-based models), empirical issues in monetary economics, business cycles and money, monetary policy, welfare cost of inflation, alternative media of exchange.

0101	L Stevens	Seats (Total: 20)
	M 2:00pm - 4:45pm	HBK 0108

ECON704 **Advanced Microeconomics II**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON604 and ECON603.

This is the second half of a two-semester sequence in Advanced Microeconomics, intended for second-year Ph.D. students. The course material varies from year-to-year, but currently it focuses on auction theory, matching theory, and the relationship between matching and auction theory. Other topics that are treated in some years include: sequential bargaining under incomplete information; and equilibrium refinements.

0101	Lawrence Ausubel TuTh 2:00pm - 3:15pm	Seats (Total: 20) TYD 0101

ECON708 **Advanced Topics in Applied and Theoretical Microeconomics**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Read, discuss, and analyze current topics in microeconomics, including public economics, environmental economics, labor economics, industrial economics, microeconomic theory, public choice and international trade. Specific topics covered will change from semester to semester depending on the students' and faculty's interests. Intended primarily for students beginning thesis research in economics.

0101	Nolan Pope MW 12:30pm - 1:45pm	Seats (Total: 15) TYD 0111
0301	Sebastian Galiani MW 12:30pm - 1:45pm	Seats (Total: 15) Location: TBA
0401	Yusuf Masatlioglu MW 12:30pm - 1:45pm	Seats (Total: 15) Location: TBA
0501	Emel Filiz Ozbay MW 12:30pm - 1:45pm	Seats (Total: 15) Location: TBA

ECON709 **Advanced Topics in Applied and Theoretical Macroeconomics**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Read, discuss, and analyze current topics in macroeconomics, including asset pricing models, models of economic growth, investment, and the labor market. Specific topics covered will change from semester to semester depending on the students' and faculty's interests. Intended primarily for students beginning thesis research in economics.

0101	Sadik Aruoba TuTh 12:30pm - 1:45pm	Seats (Total: 10) TYD 1108
0201	L Stevens TuTh 12:30pm - 1:45pm	Seats (Total: 15) Location: TBA
0301	Eunhee Lee TuTh 12:30pm - 1:45pm	Seats (Total: 15) Location: TBA
0401	Felipe Saffie TuTh 12:30pm - 1:45pm	Seats (Total: 10) Location: TBA

ECON722 **Econometrics IV**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON624; or permission of BSOS-Economics department.

Oriented towards micro-econometric methods. Topics covered will be selected from the following: Further discussion of topics covered in ECON624, binary and multinomial response models, censored and truncated regression models, sample selection models, count data models, duration models program evaluation and treatment effects methods, structural econometrics, the identification problem, stratified and clustered samples, spatial/cross sectional dependence models, dynamic panel data models, weak instruments, non-parametric estimation, boot strap and Jack Knife methods, pre-test estimators.

0101	Guido Kuersteiner, Ingmar Prucha TuTh 5:00pm - 7:30pm	Seats (Total: 20) TYD 0102

ECON742 **Advanced International Economics II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603; or permission of BSOS-Economics department.

Comparative advantage, Heckscher-Ohlin theory, specific-factors model, empirical verification, economies of scale, imperfect competition, commercial policy, factor mobility.

0101	Nuno Limao TuTh 9:30am - 10:45am	Seats (Total: 9) KEY 0124

ECON743 **Topics in International Finance**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON602; or permission of BSOS-Economics department. Recommended: ECON741.

Puzzles in international finance; portfolio balance, current account dynamics, exchange rate behavior; capital market imperfections; balance of payments crises.

0101	Sebnem Kalemli-Ozcan Tu 10:00am - 12:30pm	Seats (Total: 20) TYD 2108

ECON744 **Advanced Topics in International Economics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON601 and ECON602. Credit only granted for: ECON698M or ECON744. Formerly: ECON698M.

This is an advanced course in the intersection of international finance, trade, and macroeconomics. The goal is to integrate topics from the three fields and to understand the links between individual/micro and aggregate/macro outcomes in real and financial markets. Topics include firm sale and pricing behavior, consumer choice and aggregate responses---trade elasticities, real exchange rate fluctuations, risk sharing, portfolio choice, asset pricing anomalies, and information frictions.

0101	Ceyhun Durdu W 6:00pm - 8:45pm	Seats (Total: 15) KEY 0123

ECON745 **Advanced Topics in International Trade**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON604 and ECON624. Credit only granted for: ECON698L or ECON745. Formerly: ECON698L.

Designed primarily for students planning to write dissertations on a topic related to international trade. Its focus is on recent research in this field including tests of trade theories; the effects of trade on growth and knowledge diffusion; the political economy of trade policy and the theory and practice of trade agreements.

0101	Eunhee Lee MW 9:30am - 10:45am	Seats (Total: 20) TYD 1108

ECON752 **Public Economics II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON751.

Theoretical and empirical issues in taxation, with particular emphasis on income taxation.

0101	Melissa Kearney TuTh 11:00am - 12:15pm	Seats (Total: 20) TYD 0111

ECON756 **Empirical Political Economics**

Credits: 3 Grading Method: Regular, Audit

An introduction to empirical political economy. Determinants of individual political behavior and the impact of political rules on economic outcomes will both be analyzed. Modern applied econometric techniques will also be covered.

0101	Ethan Kaplan TuTh 9:30am - 10:45am	Seats (Total: 20) TYD 0101

ECON772 **Population Economics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON771; or permission of BSOS-Economics department.

Covers the central ideas in population economics. These include theory and test of theories of mortality, fertility and immigration.

0101	Sergio Urzua MW 9:30am - 10:45am	Seats (Total: 20) TYD 1114

ECON773 **Topics in Applied Public and Labor Economics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603, ECON604, and ECON623; and (ECON624 or ECON626).

Explore topics in labor and public economics. Study the empirical evidence and the applied methodology used within labor and public economics. Discuss important topics in labor and public economics including immigration, education, discrimination, crime, and the role of family background. Provide instruction on how to perform empirical labor and public economic research by familiarizing students with available data sources, current research methodology, and practice with statistical packages such as Stata.

0101	Nolan Pope TuTh 2:00pm - 3:15pm	Seats (Total: 20) LEF 1171

ECON781 **Valuing Environmental Benefits**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ECON603; and ECON623. Or students who have taken courses with comparable content may contact the department.

The theory and practice of valuing environmental benefits, including the health, recreation and aesthetic benefits associated with controlling air and water pollution, and the damages associated with climate change. Estimation of the benefits of energy efficiency improvements-including the benefits of fuel economy standards.

0101	Maureen Cropper MW 2:00pm - 3:15pm	Seats (Total: 20) KEY 0119

ECON799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ECON808 **Workshop on Macroeconomics, International Macroeconomics and International Finance**

(Perm req)

Credits: 2 Grading Method: Sat-Fail, Audit

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ECON graduate students only.

0101	Sadik Aruoba W 3:30pm - 6:00pm	Seats (Total: 15) TYD 1101
0201	Felipe Saffie W 3:30pm - 6:00pm	Seats (Total: 15) Location: TBA

0301	Eunhee Lee W 3:30pm - 6:00pm	Seats (Total: 15) Location: TBA

ECON828 **Workshop in Econometrics**

Credits: 2 Grading Method: Sat-Fail, Audit

Current research in econometrics. Topics drawn from theoretical and applied econometrics. Special topics include: maximum likelihood and generalized method of moments estimation of linear and non-linear models, analysis of stationary and non-stationary time series, cross section time series estimation, spatial estimation mehtods, Bayesian methods, semi-and non-parametic methods, rational expectations models, numerical methods, and various applications.

0101	Ingmar Prucha M 3:30pm - 6:00pm	Seats (Total: 20) Location: TBA

ECON848 **Workshop in International Trade, Institutional Economics and Political Economy**

(Perm req)

Credits: 2 Grading Method: Sat-Fail, Audit

*

ECON graduate students only.

0101	Peter Murrell M 3:30pm - 6:00pm	Seats (Total: 30) TYD 1132

ECON868 **Workshop in Industrial Organization, Microeconomic Theory and Behavioral and Experimental Economics**

(Perm req)

Credits: 2 Grading Method: Sat-Fail, Audit

Workshops designed to provide a structured environment for our faculty and graduate students to meet regularly to discuss and present their research ideas.

ECON graduate students only.

0101	Yusuf Masatlioglu Tu 3:30pm - 6:00pm	Seats (Total: 20) TYD 0101
0201	Daniel Vincent Tu 3:30pm - 6:00pm	Seats (Total: 20) Location: TBA

ECON878 **Workshop in Development, Labor and Public Economics**

(Perm req)

Credits: 2 Grading Method: Sat-Fail, Audit

*

ECON graduate students only.

0101	Lesley Turner Th 3:30pm - 6:00pm	Seats (Total: 15) TYD 0101
0201	Katharine Abraham Th 3:30pm - 6:00pm	Seats (Total: 15) Location: TBA

ECON898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ECON899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

EDCP Education Counseling and Personnel Services Spring 2019

EDCP105 **Professional Development Leadership Diversity Seminar**

Credits: 1 Grading Method: Regular

Restriction: Must be in the College Success Scholars Program; and permission of instructor. Credit only granted for: EDCP105 or EDCP108N. Formerly: EDCP108N.

An experiential and theoretical examination of how to successfully navigate through the job search, application process, interviews, and networking opportunities in a professional environment with an emphasis on inclusion and diversity issues

0101	Christopher Lester W 6:00pm - 7:50pm	Seats (Total: 25) HBK 0302H

EDCP108I **College and Career Advancement: Concepts and Skills; Academic Transitions to Internships**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Knowledge and skills designed to enhance college as a learning experience or preparation for life.

Restricted to students with less than 105 cumulative credits. Recommended for students who have never had an internship and are actively searching for one. Students participating in this course will engage in the full experience of searching for an internship. Course registration is closed to graduating seniors."

0101	Natalie Sullivan **Meets January 28, 2019 - March 15, 2019** Class time/details on ELMs	Seats (Total: 30) ONLINE
0201	Erin Rooney-Eckel **Meets January 28, 2019 - March 15, 2019** Class time/details on ELMs	Seats (Total: 30) ONLINE
0301	Maria Bowman **Meets January 28, 2019 - March 15, 2019** Class time/details on ELMs	Seats (Total: 30) ONLINE
0401	Natalie Sullivan **Meets March 25, 2019 - May 10, 2019** Class time/details on ELMs	Seats (Total: 30) ONLINE
0501	Erica Ely **Meets March 25, 2019 - May 10, 2019** Class time/details on ELMs	Seats (Total: 30) ONLINE
0601	Sarah Kurtz **Meets January 28, 2019 - March 15, 2019** Class time/details on ELMs *This section is restricted to CMNS students only.*	Seats (Total: 30) ONLINE

EDCP210 **Peer Counseling Skills and Mental Health Advocacy**

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must not have completed EDCP310; and must not have completed PSYC433. Credit only granted for: EDCP210, EDCP310, or PSYC433.

Introduction to core helping skills in peer counseling settings and three predominant theoretical approaches used in the counseling field (humanistic, psychodynamic, cognitive-behavioral). The course also explores mental health stigma and advocacy. Students will build an understanding of the practical application of underlying principles and theory in counseling and the helping professions, while exploring their own, and societal, biases, assumptions, and attitudes toward mental health.

0101	Justin Hillman MW 9:30am - 10:45am	Seats (Total: 18) EDU 3315
0301	Ruogu Wang MW 1:00pm - 2:15pm	Seats (Total: 18) EDU 3236
0401	Kathryn Sullivan TuTh 3:00pm - 4:15pm	Seats (Total: 18) JMZ 1117
0601	Kelsey McCurdy MW 12:00pm - 1:15pm	Seats (Total: 18) ASY 3221
0701	Gabriella Estevez MW 10:00am - 11:15am	Seats (Total: 18) SQH 1105
0801	Leyla Babaturk MW 3:00pm - 4:15pm	Seats (Total: 18) EDU 3236

EDCP298 **Special Problems in Counseling and Personnel Services**

Credits: 1-3 Grading Method: Regular, Pass-Fail

Individual instruction in special problems related to counseling, student leadership, and college student development.

Contact department for information to register for this course.

EDCP386 **Experiential Learning**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department; and sophomore standing or higher.

Special EDCP form required.

Contact department for information to register for this course.

EDCP489 **Field Experiences in Counseling and Personnel Services**

(Perm req)

Credits: 1-4 Grading Method: Regular General Education: DVUP

Planned field experience in education-related activities. Credit not to be granted for experiences accrued prior to registration.

Contact department for information to register for this course.

EDCP498 **Special Problems in Counseling and Personnel Services**

(Perm req)

Credits: 1-3 Grading Method: Regular

Available only to major students who have formal plans for individual study of approved problems.

Contact department for information to register for this course.

EDCP498B **Special Problems in Counseling and Personnel Services; From Africa to South America - The Afro-Brazilian Experience**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Available only to major students who have formal plans for individual study of approved problems.

Contact department for information to register for this course.

EDCP611 **Career Development Theory and Programs**

Credits: 3 Grading Method: Regular, Audit

Research and theory related to career and educational decisions; programs of related information and other activities in career decision.

Contact department for information to register for this course.

EDCP612 **Multicultural Issues in Counseling and Personnel Services**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department.

Socio-psychological, philosophical, clinical, and research topics related to the provision of counseling and personnel services, academic support, and career development for minority students on predominantly white college and university campuses. Implications of race and/or national origin on opportunities for personal, social, academic, and career development in educational settings.

0101	Christina Thai	Seats (Total: 15)
	Tu 5:15pm - 8:00pm	TWS 1313

EDCP621 **Practicum in School Counseling**

(Perm req)

Credits: 3-6 Grading Method: Regular, Audit

Prerequisite: EDCP616. Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department. Credit only granted for: EDCP619D or EDCP621. Formerly: EDCP619D.

Sequence of supervised counseling experiences of increasing complexity.

0101	Jessica McKechnie W 4:15pm - 7:00pm	Seats (Total: 12) JMZ 1120
0201	Jessica McKechnie M 7:00pm - 9:45pm	Seats (Total: 12) EDU 2101

EDCP625 **Counseling the Chemically Dependent**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in the School Counseling program; or permission of instructor.

Chemical dependency and its effects on the individual's personal, social, and work functioning. Counseling procedures for persons with drug and alcohol problems.

0101	Paul Gold W 4:15pm - 7:00pm	Seats (Total: 10) EDU 3236

EDCP630 **School-Based Behavioral Interventions**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of instructor; and must be in a major in EDUC-College of Education.

Behavior assessment and intervention techniques from behavioral, cognitive-behavioral, and ecological models. Planning, implementation, and evaluation of behavior change techniques.

0101	Matthew Edelstein M 7:00pm - 9:45pm	Seats (Total: 10) EDU 2102

EDCP633 **Diagnostic Appraisal of Children I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDCP632.

Assessment of development, emotional and learning problems of children.

0101	Hedwig Teglasi	Seats (Total: 10)
	Tu 10:30am - 1:15pm	EDU 3236

EDCP635 **School Consultation I**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in the School Counseling program; or must be in the School Psychology program; or permission of instructor.

Theory and practice of consultation services in the school setting. Understanding of school culture. Introduction to problem solving model of case consultation for assessment and remediation of learning and behavior problems in the classroom. Practicum experience.

0101	Lauren Kaiser	Seats (Total: 10)
	Tu 4:45pm - 7:30pm	TWS 1321

EDCP651 **Group Counseling in Schools**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDCP616; and for school counseling and school psychology students only. Restriction: Permission of instructor.

Issues and techniques of group counseling in schools.

0101	Cixin Wang	Seats (Total: 10)
	M 4:15pm - 7:00pm	PLS 1119

EDCP655 **Organizational Dimensions of Student Affairs**

Credits: 3 Grading Method: Regular

Prerequisite: EDCP610; or permission of EDUC-Counseling, Higher Education and Special Education department.

Exploration of leadership and organizational change of student affairs programs in post-secondary education.

0101	Julie Park	Seats (Total: 20)
	Th 1:00pm - 4:00pm	EDU 2101

EDCP672 **Individual and Organizational Assessment in Student Affairs**

Credits: 3 Grading Method: Regular, Audit

An examination of the scholarship and practice of assessment of college student learning and developmental outcomes as well as organizational practices that contribute to those outcomes.

0101	Ann Becks	Seats (Total: 22)
	W 1:00pm - 4:00pm	EDU 2119
	For Student Affairs Masters Student's only	

EDCP680 **Basic Didactic Practicum in Counseling Psychology**

Credits: 3 Grading Method: Sat-Fail

Prerequisite: For Counseling Psychology majors only. Formerly: PSYC776.

In depth examination of counseling theories and techniques, and supervised experience in application of a range of counseling and therapy approaches.

0101	Pepper Phillips	Seats (Total: 8)
	Tu 12:00pm - 3:00pm	SHM 1106A

EDCP686 **Counseling Psychology Didactic Practicum in Career Interventions**

Credits: 3 Grading Method: Sat-Fail

Prerequisite: For Counseling Psychology majors only. Formerly: EDCP777.

In depth examination of theorectical approaches and issues in career interventions; supervised experience in career counseling and assessment.

0101	Kelly Lee	Seats (Total: 8)
	Th 12:00pm - 3:00pm	SHM 1106A

EDCP693 **Assessment in Counseling Psychology ii**

Credits: 3 Grading Method: Regular

Prerequisite: For Counseling Psychology majors only. Formerly: EDCP789F.

Supervised experience in administration, scoring, and interpreting majo psychodiagnostic instruments used by counseling psychologists, as well as writing integrative assessment reports. Emphasis on hypothesis testing approach to assessment and on the counseling interview as an assessment tool.

0101	Matthew Miller Tu 10:00am - 1:00pm	Seats (Total: 20) EDU 2102

EDCP738 **Practicum in Child Assessment**

Credits: 3 Grading Method: Regular, Audit

Administration of complete test batteries to children; supervision of initial interviews; test administration and scoring; interpretation and synthesis of test battery and interview material; the psychological report; verbal interpretation of test results; and recommendations. Taken initially with EDCP 633; repeated with EDCP 634 in the subsequent semester.

Class meets in 1102M Seneca Building.

0101	Jill Jacobson Th 9:00am - 12:15pm	Seats (Total: 4) Location: TBA
0201	Jill Jacobson Th 11:15am - 2:30pm	Seats (Total: 4) Location: TBA

EDCP742 **Examining College Environments and Outcomes**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDMS651; or permission of instructor. Credit only granted for: EDCP742 or EDCP789K. Formerly: EDCP789K.

Explores theory and research on the impact of the college environment o undergraduate student outcomes. Discusses environmental theory and assessment, college impact theory, outcomes assessment, and implications of the above for higher education and student affairs.

0101	Julie Park Th 9:00am - 12:00pm	Seats (Total: 15) EDU 2101

EDCP773 **Designing Qualitative Research in Counseling and Student Affairs Contexts**

Credits: 3 Grading Method: Regular, Audit

Introduction to philosophical and epistemological foundations, methodologies and methods associated with qualitative research designs appropriate in student affairs and counseling contexts.

0101	Bridget Kelly Th 4:15pm - 7:00pm *(Doctoral Students Only)*	Seats (Total: 15) EDU 2102
0201	Kelly Slay Tu 1:00pm - 4:00pm *(Master Students Only)*	Seats (Total: 17) EDU 2101

EDCP788 **Advanced Practicum**

Credits: 1-6 Grading Method: Regular, Audit

Individual supervision in one of the following areas: (a) individual counseling, (b) group counseling, (c) consultation, or (d) administration.

5001	John Zacker Contact instructor or department for details.	Seats (Total: 5)

EDCP789 **Advanced Topics in Counseling and Personnel Services**

Credits: 1-6 Grading Method: Regular, Audit

0201	Matthew Miller Contact instructor or department for details.	Seats (Total: 5)
5101	Candace Moore Contact instructor or department for details.	Seats (Total: 5)

EDCP789B **Advanced Topics in Counseling and Personnel Services; Methods of Intervention**

Credits: 3 Grading Method: Regular, Audit

0101	Cixin Wang M 10:00am - 12:45pm	Seats (Total: 10) EDU 2102

EDCP789N **Advanced Topics in Counseling and Personnel Services; Therapeutic Approaches with Children**

Credits: 3 Grading Method: Regular, Audit

0101	Stephanie Wolf	Seats (Total: 6)
	F 10:00am - 12:45pm	ARC 1123

EDCP797 **Capstone Course: Program Planning**

Credits: 3-6 Grading Method: Regular, Audit

Restriction: Must be in the School Counseling program. Credit only granted for: EDCP789T or EDCP797. Formerly: EDCP789T.

0101	Nikki Ham	Seats (Total: 10)
	Tu 7:00pm - 10:00pm	EDU 2102

EDCP798 **Special Problems in Counseling and Personnel Services**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Master's AGS, or doctoral candidates who desire to pursue special research problems under the direction of their advisers may register for credit under this number.

Contact department for information to register for this course.

EDCP798P **Special Problems in Counseling and Personnel Services; Seminar Paper**

Credits: 1-6 Grading Method: Regular, Audit

Master's AGS, or doctoral candidates who desire to pursue special research problems under the direction of their advisers may register for credit under this number.

Malta Outreach Program. Registration restricted to program participants.

Contact department for information to register for this course.

EDCP799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Registration required to the extent of six hours for Master's thesis.

Contact department for information to register for this course.

EDCP870 **Professional Issues Seminar**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCP656 or EDCP870. Formerly: EDCP656.

Examination of issues that bear on professional issues such as ethics, inter-professional relationships and research.

0101	Paul Gold Th 4:15pm - 7:00pm	Seats (Total: 15) EDU 3236

EDCP888 **Apprenticeship in Counseling and Personnel Services**

(Perm req)

Credits: 1-8 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

Contact department for information to register for this course.

EDCP888A **Apprenticeship in Counseling and Personnel Services; College Student Personnel**

Credits: 3 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

0101	Marsha Guenzler-Stevens Contact instructor or department for details.	Seats (Total: 10)
7001	Julie Park Contact instructor or department for details.	Seats (Total: 3)
7201	Michelle Espino Contact instructor or department for details.	Seats (Total: 10)

EDCP888C **Apprenticeship in Counseling and Personnel Services; School Psychology**

Credits: 1-8 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

0101	Jill Jacobson Contact instructor or department for details.	Seats (Total: 15)
0201	Hedwig Teglasi W 3:15pm - 4:45pm	Seats (Total: 15) ASY 3221
0401	Instructor: TBA Contact instructor or department for details.	Seats (Total: 15)
0501	Judith Kinney Contact instructor or department for details.	Seats (Total: 10)

EDCP888G **Apprenticeship in Counseling and Personnel Services; School Counseling**

Credits: 3 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

0101	Jessica McKechnie W 7:15pm - 10:00pm	Seats (Total: 10) EDU 3236

EDCP889 **Internship in Counseling and Personnel Services; Internship in Counseling and Personnel Services**

Credits: 1-8 Grading Method: Regular, Audit

Internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Contact department for information to register for this course.

EDCP889I **Internship in Counseling and Personnel Services; Internship in School Psychology**

Credits: 1-8 Grading Method: Regular, Audit

Internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

5301	Jill Jacobson Tu 5:00pm - 7:00pm	Seats (Total: 6) Location: TBA

EDCP898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EDCP899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Registration required to the extent of 12-18 hours for a Ph.D. Dissertation.

Contact department for information to register for this course.

EDHD Education, Human Development Spring 2019

EDHD201 **Learning How to Learn**

Credits: 3 Grading Method: Regular General Education: DSHS

Immerses students in the theoretical and empirical study of learning by engaging them in orchestrated experiences and activities drawn directly from the disciplinary research. Students achieve deep understanding of their own learning, as well as the means of enhancing that learning both in school and out-of-school contexts.

0101	Patricia Alexander MW 11:00am - 11:50am M 12:00pm - 12:50pm	Seats (Total: 25) ESJ 2204 EDU 2119	 Lab
0102	Patricia Alexander MW 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 25) ESJ 2204 EDU 2119	 Lab
0103	Patricia Alexander MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 25) ESJ 2204 EDU 2119	 Lab
0104	Patricia Alexander MW 11:00am - 11:50am M 1:00pm - 1:50pm	Seats (Total: 25) ESJ 2204 EDU 3315	 Lab
0105	Patricia Alexander MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 25) ESJ 2204 EDU 3315	 Lab

0106	Patricia Alexander	Seats (Total: 25)	
	MW 11:00am - 11:50am	ESJ 2204	
	F 1:00pm - 1:50pm	EDU 3315	Lab

EDHD210 **Foundations of Early Childhood Education**

(Perm req)

Credits: 3 Grading Method: Regular CORE: HO General Education: DSHS

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department.

Students explore historical and current research in early childhood education, primary models of curriculum and pedagogy in the field, and the relationship between critical aspects of young children's development and the creation of inclusive learning opportunities for all children, including children at risk. The concept of developmentally appropriate practice and its application across different developmental levels and early childhood classrooms will be introduced and connected with discussion in EDHD220 and EDSP211. Students examine issues in developing and implementing high quality early childhood education experiences for young children with and without disabilities, including the influence of family, culture, and community, the needs of children at risk (e.g., poverty, immigrant status, English Language Learners), and the role of assessment in early learning.

0101	Francine Marchese	Seats (Total: 25)	
	Tu 4:15pm - 7:00pm	EDU 2102	

EDHD220 **Exploring Early Childhood General and Special Education**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department.

Students who are considering a career in education will consider information about the teaching profession. Students reflect on their personal strengths, identify areas of growth, and examine their predisposition to work with young children with and without disabilities. They will discuss the nature of teaching, the moral and philosophic underpinnings that influenced their decision to enter into the teaching professions, as well as the roles and responsibilities of teachers and the characteristics and qualities for effective teachers (teaching styles and teacher's primary role in the classroom).

Students should allow an appropriate amount of travel time from the off-campus experience to your classes meeting on campus.

0101	Leigh Kurz	Seats (Total: 7)	
	W 2:00pm - 4:00pm	EDU 3233	
	M 8:30am - 12:30pm	Location: TBA	Lab

0102	Leigh Kurz W 2:00pm - 4:00pm Tu 8:30am - 12:30pm	Seats (Total: 6) EDU 3233 Location: TBA	Lab
0104	Leigh Kurz W 2:00pm - 4:00pm Th 8:30am - 12:30pm	Seats (Total: 6) EDU 3233 Location: TBA	Lab
0105	Leigh Kurz W 2:00pm - 4:00pm F 8:30am - 12:30pm	Seats (Total: 6) EDU 3233 Location: TBA	Lab

EDHD221 **Aggression and Violence in Everyday Life: Can Violence Be Prevented?**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

History of aggression and violence in the world and in the United States. Examines the extent to which various forms are prevalent today and scientifically supported prevention strategies. Methods of studying aggression are reviewed, as are theories and methods of preventing aggression and violence.

0101	Jennie Lee-Kim Tu 9:30am - 12:15pm	Seats (Total: 55) SQH 1117

EDHD231 **Inside 21st Century Creativity: How Creative Ideas, Concepts, and Products are Generated**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Mechanisms of the creative mind. Psychological, social, sociological, developmental, cultural, educational, genetic and neural based roots of creativity.

0101	Kevin Dunbar TuTh 11:00am - 12:15pm	Seats (Total: 50) EDU 3315

EDHD306 **Research Methods in Human Development**

Credits: 3 Grading Method: Regular, Audit General Education: FSAR

Addresses the scientific concepts and principles central to the study of human behavior and development. Students will learn about basic research methods in studying human behavior in developmental context and will participate in experiential activities, such as conducting observations and collecting self-report data. Major themes: goals of developmental research, fundamental research designs, types of measurement, elements of good scientific writing, and ethical issues in the study of human development.

0101	Hongyang Zhao MW 11:00am - 12:15pm	Seats (Total: 40) EDU 1121
0201	Anisha Singh TuTh 9:30am - 10:45am	Seats (Total: 40) EDU 1107

EDHD319 **Selected Topics in Human Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics in human development in relation to contemporary culture.

Contact department for information to register for this course.

EDHD320 **Human Development Through the Life Span**

Credits: 3 Grading Method: Regular, Audit General Education: DSHS

Central concepts related to parameters of human development, individual and social, which arise throughout the life span. Continuity and change within the developing individual.

0101	Laura Jimenez Parra Tu 9:30am - 10:45am Class time/details on ELMs *Restricted to pre-nursing students.*	Seats (Total: 40) EDU 1121 ONLINE
0201	Jennie Lee-Kim Th 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 40) EDU 1121 ONLINE

EDHD386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department; and junior standing or higher.

Contact department for information to register for this course.

EDHD411 **Child Growth and Development**

Credits: 3 | Grading Method: Regular, Audit | General Education: DSHS

Theoretical approaches to and empirical studies of physical, psychological and social development from conception to puberty. Implications for home, school and community.

0101	Lucas Butler M 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 40) TYD 2108 ONLINE
0201	Lucas Butler M 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 40) TYD 2108 ONLINE

EDHD413 **Adolescent Development**

Credits: 3 | Grading Method: Regular, Audit | General Education: DSHS

Adolescent development, including special problems encountered in contemporary culture. Observational component and individual case study.

0101	Geetha Ramani MW 11:00am - 12:15pm	Seats (Total: 40) EDU 3315

EDHD415 **Promoting the Social-Emotional Competence of Young Children in Inclusive Classrooms**

(Perm req)

Credits: 3 | Grading Method: Regular

Prerequisite: EDHD314 and EDHD425; and (EDHD419 or EDSP420). Corequisite: EDSP423, EDSP424, and EDHD431. Restriction: Must be in the Professional Early Childhood/Early Childhood Special Education program; and junior standing or higher; and minimum cumulative GPA of 2.75.

Teachers must have knowledge and skill regarding how to appropriately manage the classroom so that all children, those with and without disabilities, will be able to learn from their school experiences. Classroom management extends beyond responding to student misbehavior to include a comprehensive approach to addressing the social/emotional competence of typically and atypically developing children. The goal of this course is to prepare early childhood teachers who are able to sensitively, responsively, and effectively manage a classroom of young students who are typically developing and those who have disabilities. Includes Field Experience.

0101	D'Lisa Worthy	Seats (Total: 25)
	M 4:15pm - 6:15pm Contact instructor or department for details.	EDU 3315

EDHD420 **Cognitive Development and Learning**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: EDHD320, EDHD411, PSYC341, or PSYC355; or permission of EDUC-Human Development and Quantitative Methodology department.

Current developmental theories of cognitive processes such as language, memory, and intelligence and how differences in cognitive level (infancy through adolescence) mediate learning of educational subject matters.

0101	Richard Prather	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	EDU 3315

EDHD424 **Culture, School & Community: Contexts for Learning (PreK-3rd)**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: EDHD425 and EDHD314; and (EDHD419 or EDSP420). Corequisite: EDSP315, EDHD431, EDHD415, and EDSP423. Restriction: Must be in the Professional Early Childhood/Early Childhood Special Education program; and junior standing or higher; and minimum cumulative GPA of 2.75.

Explores the development of the young child (with and without disabilities, as well as those at environmental risk) in the context of the family and community, with emphasis on the impact of state, federal and school system policy on the child's world. Course will consider issues within the family, and the wider socio-cultural ecology that relate to the child's ability to develop and learn. In addition, students will develop strategies for respectful and culturally responses approaches to actively engage families in their children's development and learning. Includes Field Experience.

0101	Doireann Renzi	Seats (Total: 25)
	W 10:00am - 12:00pm Contact instructor or department for details.	EDU 3236

EDHD425 **Language Development and Reading Acquisition**

Credits: 3 Grading Method: Regular

This course focuses on young children's language development and the relationship between language and reading acquisition. Students will learn: concepts central to language development; language achievements at different ages; concepts of emergent literacy; models of reading acquisition and skilled reading.

0101	Min Wang	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	EDU 2119

EDHD426 **Cognitive and Motivational Literacy Content**

(Perm req)

Credits: 3 Grading Method: Regular

Students preparing for secondary teaching will learn about the cognitive and motivational aspects of literacy and learning from text for the content areas of literature, science, history and mathematics. Different evidenced-based literacy approaches appropriate for content learning are presented. Characteristics of learning environments that enable students to engage productively with diverse texts, disciplinary tasks, and technological resources in content areas are identified.

Restricted to major codes 0831L, 0831P, 0833L, 0833P, 0843L, 0834P, 0840L, 0840P, 0841L, 0841P, 0842L, 0842P, 0843L, 0843P, 0844L, 0844P.

0101	Daphne Williams	Seats (Total: 40)
	Tu 7:00pm - 9:45pm	EDU 3315

EDHD431 **Child Development and Learning, Three to Eight Years**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in EDHD314 and EDHD425; and 1 course with a minimum grade of C- from (EDHD419, EDSP420). Corequisite: EDSP423 and EDSP315; and TRACK I: Must be concurrently enrolled in EDSP430, EDSP433; or TRACK 2: Must be concurrently enrolled in EDHD415, EDHD424.

Provides a basic understanding of child development theory and research, as well as specific knowledge about the development of children during the early and middle childhood "stages," specifically from ages 3 years to 8 years. A major emphasis will be the application of theory and research from the field of educational psychology to an understanding of how young children learn and achieve academically. Because the course will address the developmental and academic functioning of children with and without disabilities, a particular focus will be on individualization.

0101	Jennie Lee-Kim	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	EDU 1121

EDHD432 **Internship in EC/ECSE**

Credits: 12 Grading Method: Sat-Fail

Prerequisite: EDHD323, EDHD322, EDSP417, EDHD441, EDHD442, EDHD443, EDHD444, and EDSP321. Corequisite: EDHD437. Restriction: Must be in Early Childhood and Early Childhood Special Education program; and senior standing or higher.

Interns spend five days per week in the classroom/home-based setting (under the mentorship of a certified teacher) where they gradually assume full responsibility for the planning, delivery and assessment of instruction or an intervention. Track I students will have an Infant/Toddler placement with special educator, Track II students will be in a Pre-K/K or Grade 1,2,3 classroom with general or special educator (must be opposite grade level and mentor from Phase I/fall of the senior year).

Students must pay a $750.00 lab fee.

0101	Judith Anderson	Seats (Total: 28)
	Contact instructor or department for details.	

EDHD436 **Cognition and Motivation in Content Area Literacy for Middle-School Students**

Credits: 3 Grading Method: Regular

Cognitive and motivational processes of literacy and learning from texts across subjects. Structured approaches to using reading, writing, and speaking for content learning based on approaches to knowledge, motivation, and strategies. Classroom contexts that enable middle-school students to engage with diverse texts and Internet resources are provided

0101	Renae McPherson	Seats (Total: 30)
	Th 4:15pm - 7:00pm	EDU 3315
	Restricted to 0804L and 0804P major codes.	

EDHD437 **EC/ECSE Teachers as Researchers and Reflective Practitioners**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in EDHD322, EDHD323, EDSP321, EDSP417, EDHD441, EDHD442, EDHD443, and EDHD444. Corequisite: EDHD432.

Students use action research to improve instructional delivery or familial interactions in an effort to enhance the overall educational experiences/outcomes of children in classrooms or home-based contexts. Students will design and implement an action research project in an effort to meet a goal articulated in an applicable Individualized Education Plan (IEP) or Individualized Family Service Plan (IFSP) or School Improvement Plan (SIP) as the basis of their project.

0101	Judith Anderson	Seats (Total: 28)
	Th 4:15pm - 7:00pm	JMZ 1122

EDHD460 **Educational Psychology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS

Prerequisite: PSYC100; or permission of EDUC-Human Development and Quantitative Methodology department.

Application of psychology to learning processes and theories. Individual differences, measurement, motivation, emotions, intelligence, attitudes, problem solving, thinking and communicating in educational settings.

0101	Yuting Sun TuTh 11:00am - 12:15pm	Seats (Total: 40) EDU 1107
0201	Min Wang TuTh 2:00pm - 3:15pm	Seats (Total: 40) TYD 2110

EDHD489 **Field Experiences in Education**

(Perm req)

Credits: 1-4 | Grading Method: Regular, Pass-Fail, Audit

Planned field experience in education-related activities. Credit not to be granted for experiences accrued prior to registration.

Contact department for information to register for this course.

EDHD498 **Special Problems in Education**

(Perm req)

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Available only to students who have definite plans for individual study of approved problems.

Contact department for information to register for this course.

EDHD498E **Special Problems in Education; Child's Play**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Available only to students who have definite plans for individual study of approved problems.

0101	Kenneth Rubin TBA	Seats (Total: 18) EDU 1108

EDHD624 **Cognitive and Motivational Bases of Literacy Instruction in the Content Areas**

Credits: 6 Grading Method: Regular

Credit only granted for: EDHD624 or EDHD779G. Formerly: EDHD779G.

Secondary and middle school teachers learn about and apply knowledge and skills related to the cognitive and motivational dimensions of literacy and learning from text for a variety of content areas. Characteristics of learning environments that enable students to engage productively with diverse texts, disciplinary tasks, and technological resources in content areas are identified.

Contact department for information to register for this course.

EDHD629 **Seminar for the Center for Children, Relationships, and Culture**

Credits: 1 Grading Method: Regular, Audit

A seminar and colloquia series featuring speakers from the department, the college, the university, and other universities and institutions from across the world that aims to cover issues pertaining to contemporary theory and research in human development.

0101	Geetha Ramani	Seats (Total: 25)
	W 12:20pm - 2:45pm	EDU 1121

EDHD635 **Adolescents at Risk**

Credits: 3 Grading Method: Regular, Audit

Recommended: EDHD600. Credit only granted for: EDHD635 or EDHD779L. Formerly: EDHD779L.

Study of current research on risky behaviors that impact adolescent student learning and achievement particular in underserved populations. General diversity issues and topics specific issues that put adolescents at risk for academic failure and other negative trajectories will be explored.

Contact department for information to register for this course.

EDHD674 **Self Processes in Adolescence: Implications for Academic Achievement and School Adjustment**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHD619L or EDHD674. Formerly: EDHD619L.

Study of the development of the self from infancy through adolescence, and examination of the literature on the self processes of special adolescent populations as they relate to achievement-related orientations and school adjustment in secondary settings.

Contact department for information to register for this course.

EDHD718 **Apprenticeship in College Teaching**

(Perm req)

Credits: 1 Grading Method: Regular

For graduate students teaching autonomously for the first, second, or third tiem at the University of Maryland, College Park; not intended for teaching assistants. This course provides graduate student teachers with a set of structured experiences that foster professional growth and development in the role of college instructor. Includes seminars on the scholarship of college teaching and principles of optimal college classroom environments, peer and faculty in-class observations of teaching, and guided reflective analysis of experience in the classroom.

0101	Ann Battle	Seats (Total: 10)
	F 1:00pm - 3:30pm	EDU 3236

EDHD750 **Culture, Context, and Development**

Credits: 3 Grading Method: Regular

This course will cover theory and research on cultural and contextual influences on social development.

0101	Melanie Killen	Seats (Total: 20)
	Th 1:00pm - 3:45pm	EDU 1108

EDHD760 **Advanced Educational Psychology**

Credits: 3 Grading Method: Regular

Prerequisite: Prior course in educational psychology, learning, or cognition; or permission of EDUC-Human Development and Quantitative Methodology department.

Appplication of psychology to learning processes and theories. Individual differences, measurement, motivation, and intelligence.

0101	Patricia Alexander	Seats (Total: 20)
	W 4:15pm - 7:00pm	EDU 3233

EDHD775 **Human Development and Neuroscience**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: EDHD601; or permission of EDUC-Human Development and Quantitative Methodology department.

Course focuses on the biological bases of human behavior including physiological processes which have an impact on human development.

0101	Kevin Dunbar	Seats (Total: 20)
	Tu 2:00pm - 4:45pm	EDU 3236

EDHD780 **Research Methods in Human Development**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDMS651; or permission of EDUC-Human Development and Quantitative Methodology department.

Research methodology for studying human development: research design, hypothesis formulation, instrument development, methodological and statistical approaches, survey of methodologies.

0101	Richard Prather	Seats (Total: 20)
	Th 9:30am - 12:15pm	EDU 3233

EDHD789 **Internship in Human Development**

(Perm req)

Credits: 3-8 Grading Method: Regular, Audit

Internship experience in one or more human service agencies in the community.

Contact department for information to register for this course.

EDHD798 **Laboratory in Human Development**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Independent research supervised by an instructor in a research setting.

Limited to human development majors.

Contact department for information to register for this course.

EDHD799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Registration required to the extent of six hours for master's thesis.

Limited to human development majors.

Contact department for information to register for this course.

EDHD888 **Apprenticeship in Human Development Research**

(Perm req)

Credits: 1-8 Grading Method: Regular, Audit

Apprenticeship in Human Development research.

Contact department for information to register for this course.

EDHD889 **Practicum in Human Development**

(Perm req)

Credits: 3-8 Grading Method: Regular, Audit

Field experience in applied human development at a professional level o competence in a particular role with appropriate supervision.

Contact department for information to register for this course.

EDHD898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EDHD899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Registration required to 12-18 hours for a Ph.D. dissertation.

Limited to human development majors.

Contact department for information to register for this course.

EDHI Education Leadership, Higher Ed and International Ed Spring 2019

EDHI338J **Teaching and Learning about Cultural Diversity through Intergroup Dialogue; Facilitator Practicum**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill for, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships. Whereas in debate, students learn to listen to gain advantage, in intergroup dialogue, students learn to listen to gain understanding. In so doing, students develop increased multicultural interaction facility, heightened intergroup awareness and sensitivity, and greater commitment to civic engagement.

Restricted to undergraduate students participating in WEIDP facilitator practicum.

0101	Jazmin Pichardo, Timea Webster	Seats (Total: 5)
	Contact instructor or department for details.	

EDHI338L **Teaching and Learning about Cultural Diversity through Intergroup Dialogue; Race, Gender, or Immigration**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVCC

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill for, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships. Whereas in debate, students learn to listen to gain advantage, in intergroup dialogue, students learn to listen to gain understanding. In so doing, students develop increased multicultural interaction facility, heightened intergroup awareness and sensitivity, and greater commitment to civic engagement.

0101	Jazmin Pichardo, Michelle Strange, Timea Webster, Nana Brantuo, Tiffany Harris, Elizabeth Sweeney, Alison Mojto, Laura Bohorquez Garcia, Courtney Riley, David Bonilla-Ciferri **Meets March 25, 2019 - May 6, 2019** M 6:30pm - 8:30pm	Seats (Total: 42) Location: TBA

EDHI338M **Teaching and Learning about Cultural Diversity through Intergroup Dialogue; Religious Bias or Socioeconomic Status**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVCC

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill for, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships. Whereas in debate, students learn to listen to gain advantage, in intergroup dialogue, students learn to listen to gain understanding. In so doing, students develop increased multicultural interaction facility, heightened intergroup awareness and sensitivity, and greater commitment to civic engagement.

0201	Kevin Webb, Jazmin Pichardo, Timea Webster, Peter DeCrescenzo, Judith Martinez, Louisa Nkrumah **Meets March 25, 2019 - May 7, 2019** M 6:30pm - 8:30pm	Seats (Total: 28) Location: TBA

EDHI338O **Teaching and Learning about Cultural Diversity through Intergroup Dialogue; Gender or Sexual Identity**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVCC

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill for, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships. Whereas in debate, students learn to listen to gain advantage, in intergroup dialogue, students learn to listen to gain understanding. In so doing, students develop increased multicultural interaction facility, heightened intergroup awareness and sensitivity, and greater commitment to civic engagement.

0201	Collin Vernay, Jazmin Pichardo, Timea Webster, Elizabeth Sweeney, Stephanie Yee, Tynesha McCullers, Hana Zewdie, Joanie Garcia, Thomas Le, Lydia Woods **Meets March 25, 2019 - May 10, 2019** Tu 5:30pm - 7:30pm	Seats (Total: 42) Location: TBA

EDHI338U **Teaching and Learning about Cultural Diversity through Intergroup Dialogue; US Identity in a Global Context**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill for, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships. Whereas in debate, students learn to listen to gain advantage, in intergroup dialogue, students learn to listen to gain understanding. In so doing, students develop increased multicultural interaction facility, heightened intergroup awareness and sensitivity, and greater commitment to civic engagement.

Contact department for information to register for this course.

EDHI488C **Special Topics in Education Policy and Administration; World Religions and Implications for Education**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special and intensive treatment of current topics and issues in education policy and administration.

0101	Jing Lin M 4:15pm - 7:00pm	Seats (Total: 20) EDU 1315

EDHI489 **Field Experiences in Education**

(Perm req)

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Planned field experience in education-related activities. Credit not to be granted for experiences accrued prior to registration.

Contact department for information to register for this course.

EDHI498 **Special Problems in Education**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Available only to students who have definite plans for individual study of approved problems.

Contact department for information to register for this course.

EDHI607 **Culture and Education in a Global Context**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI607, EDPL607, or EDPS607. Formerly: EDPL607.

Examines cultural theories and analyzes cultural influences in education. Course materials and discussion critically analyze cultural transmission and schooling practices. Also examined are politics of culture, multiculturalism, global cultural clashes, and educators as critical culture workers.

0101	Jing Lin	Seats (Total: 20)
	W 4:15pm - 7:00pm	EDU 1315

EDHI653 **Organization and Administration of Higher Education**

Credits: 3 Grading Method: Regular

Credit only granted for: EDHI653, EDPL653, or EDPS653. Formerly: EDPL653.

Basic concepts and terminology related to organizational behavior and institutional governance structures. The governance and organization of higher education in the United States.

0101	Alberto Cabrera Casillas	Seats (Total: 20)
	W 4:15pm - 7:00pm	EDU 0220

EDHI664 **The College Experience**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of instructor. And must be in a major within EDUC-Counseling, Higher Education and Special Education department; or must be in a major within EDUC-Education Policy and Leadership department; or must be in a major within EDUC-Teaching, Learning, Policy and Leadership department. Credit only granted for: EDHI664, EDPL664, or EDPS664. Formerly: EDPL664.

Designed to provide students with an overview of the research and scholarship on two of the major stakeholders in higher education -- students and faculty. Examines the educational experiences of college students in and out of the classroom in higher education in the United States by focusing on what students learn and the different collegiate experiences that influence their learning.

0101	Alberto Cabrera Casillas	Seats (Total: 15)
	Th 4:15pm - 7:00pm	EDU 2101

EDHI679 **Master's Seminar**

Credits: 3 Grading Method: Regular, Audit

Directed study for master's degree students writing seminar papers.

Contact department for information to register for this course.

EDHI683 **World Religions and Their Implications for Education**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI683 or EDHI788C. Formerly: EDHI788C.

Students develop a basic understanding of world religions, looking at their orgins, development, teachings, and primary figures. Students explore the roles, meaning, purpose that education plays in the various religions and examine their implications for education in the 21st century.

0101	Jing Lin	Seats (Total: 20)
	M 4:15pm - 7:00pm	EDU 1315

EDHI684 **Alternative Education, Alternative Development**

Credits: 3 Grading Method: Regular, Audit

Recommended: EDHI606. Credit only granted for: EDHI684 or EDHI788D. Formerly: EDHI788D.

A critical examination of the political economy of education and international development policies and practices. Focus is on the implications of these critiques for alternative education and development policies and practices.

0101	Steven Klees	Seats (Total: 20)
	Tu 4:15pm - 7:00pm	EDU 2101

EDHI689 **Practicum In Educational Administration and Supervision**

(Perm req) Credits: 1-3 Grading Method: Sat-Fail

Promotes skill development in managerial, leadership and supervisory areas. Practicum is based on results of diagnostic instruments and an individual professional development plan.

Contact department for information to register for this course.

EDHI754 **Higher Education Finance**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI754, EDPL754, or EDPS754. Formerly: EDPL754.

Economic perspectives on higher education. Ways of financing higher education and current finance issues. Higher education budget concepts and processes.

0101	Marvin Titus	Seats (Total: 15)
	M 4:15pm - 7:00pm	EDU 2102

EDHI788 **Special Topics in Education Policy and Administration**

Credits: 1-3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in education policy and administration.

Contact department for information to register for this course.

EDHI788X **Special Topics in Education Policy and Administration; International Investigations in Cuban Education**

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in education policy and administration.

Contact department for information to register for this course.

EDHI788Y **Special Topics in Education Policy and Administration; State-Level Higher Education Research**

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in education policy and administration.

0101	Marvin Titus	Seats (Total: 20)
	Tu 4:15pm - 7:00pm	EDU 1107

EDHI789 **Doctoral Practicum in Administration and Supervision**

Credits: 1-3 Grading Method: Sat-Fail

Experiential activities designed to enhance student skills. Based on Individual Professional Development Plan for each student.

Contact department for information to register for this course.

EDHI798 **Special Problems in Education**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Master's, AGS, or doctoral candidates who desire to pursue special research problems under the direction of their advisors may register for credit under this number.

Contact department for information to register for this course.

EDHI799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

EDHI805 **Seminar in Comparative Education**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI805, EDPL805, or EDPS805. Formerly: EDPL805.

Analysis of educational issues on a worldwide basis with opportunities to focus on a particular country on an individual basis. Analysis of qualitative research methods as used in cross-cultural and comparative education studies.

0101	Steven Klees M 7:00pm - 9:45pm	Seats (Total: 20) EDU 3233

EDHI888 **Apprenticeship in Education**

Credits: 1-8 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

0101	Sharon Fries-Britt Contact instructor or department for details.	Seats (Total: 5)

2701	Marvin Titus Contact instructor or department for details.	Seats (Total: 5)
3501	Alberto Cabrera Casillas Contact instructor or department for details.	Seats (Total: 5)

EDHI889 **Internship in Education**

(Perm req)

Credits: 3-8 Grading Method: Regular, Audit

Internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Contact department for information to register for this course.

EDHI898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EDHI899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Registration required to the extent of 6-9 hours for an Ed.D. Project and 12-18 hours for a Ph.D. Dissertation.

Contact department for information to register for this course.

EDMS Measurement, Statistics, and Evaluation Spring 2019

EDMS451 **Introduction to Educational Statistics**

Credits: 3 Grading Method: Regular, Audit General Education: FSAR

Restriction: Sophomore standing or higher. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introduction to statistical reasoning; location and dispersion measures; computer applications; regression and correlation; formation of hypotheses tests; t-test; one-way analysis of variance; analysis of contingency tables.

0101	Kaiwen Man TuTh 2:00pm - 3:15pm	Seats (Total: 30) EDU 2119
0201	Kaiwen Man TuTh 12:30pm - 1:45pm	Seats (Total: 30) EDU 1121
0301	Christian Meyer MW 11:00am - 12:15pm	Seats (Total: 30) EDU 1107

EDMS626 **Instrumentation**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDMS623.

Theory, development, and applications of various affective, cognitive, or behavioral measurement instruments and procedures, including questionnaire and test items, observational protocols, and cutting-edge innovative game and scenario-based assessments.

0101	Hong Jiao Th 4:15pm - 7:00pm	Seats (Total: 20) EDU 1121

EDMS645 **Quantitative Research Methods I**

Credits: 3 Grading Method: Regular, Audit

Research design and statistical applications in educational research: data representation; descriptive statistics; estimation and hypothesis testing. Application of statistical computer packages is emphasized.

0101	Amber Bloomfield M 4:15pm - 7:00pm	Seats (Total: 30) EDU 3233

EDMS646 **General Linear Models I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDMS645; or an equivalent introductory statistics course.

A first post-introductory inferential statistics course, with emphasis on analysis of variance procedures and designs from within the general linear modeling framework. Assignments include student analysis of education and related data; application of statistical software packages is emphasized.

0101	Jeffrey Harring Tu 4:15pm - 7:00pm	Seats (Total: 30) EDU 3315

EDMS647 **Causal Inference and Evaluation Methods**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed or be concurrently enrolled in EDMS651.

Counterfactual (potential outcomes) framework for causal inference, design/analysis strategies for confounder control, and specific best-practice applications to the evaluation of programs.

0101	Tracy Sweet Tu 4:15pm - 7:00pm	Seats (Total: 20) EDU 1121

EDMS651 **General Linear Models II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDMS646; or students who have taken courses with comparable content may contact the department.

Multiple regression and correlation analysis; trend analysis; hierarchical and stepwise procedures; logistic regression; software for regression analysis.

0101	Jeffrey Harring M 4:15pm - 7:00pm	Seats (Total: 30) EDU 1107

EDMS722 **Structural Modeling**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDMS657.

Statistical theory and methods of estimation used in structural modeling; computer program applications; multisample models; mean structture models; structural models with multilevel data (e.g., sampling weights, growth models, multilevel latent variable models).

0101	Gregory Hancock Tu 4:15pm - 7:00pm	Seats (Total: 30) EDU 0220

EDMS724 **Modern Measurement Theory**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: EDMS623 and EDMS651.

Theoretical formulations of measurement from a latent trait theory perspective.

0101	Ji Seung Yang	Seats (Total: 20)
	W 4:15pm - 7:00pm	EDU 2101

EDMS738F **Seminar in Special Problems in Measurement; Assessment and Evaluation for School Leaders: 1**

Credits: 3

Grading Method: Regular, Audit

An opportunity for students with special interests to focus in depth on contemporary topics in measurement. Topics to be announced, but will typically be related to applied and theoretical measurement.

Contact department for information to register for this course.

EDMS769K **Special Topics in Applied Statistics in Education; Applied Program Evaluation**

Credits: 3

Grading Method: Regular, Audit

Designed primarily for students majoring or minoring in measurement, statistics or evaluation.

Contact department for information to register for this course.

EDMS787 **Bayesian Inference and Analysis**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: EDMS651. Credit only granted for: EDMS769B or EDMS787. Formerly: EDMS769B.

Models and model fitting methods commonly used in Bayesian Inference, such as Markov Chain Monte Carlo methods (e.g., Gibbs, Metropolis Sampling), with applications within and beyond the social and behavioral sciences. Analytical and philosophical differences between Frequentist and Bayesian statistics will also be highlighted.

For Majors Only.

0101	Yang Liu	Seats (Total: 20)
	M 4:15pm - 7:00pm	ASY 3215

EDMS798 **Special Problems in Education**

(Perm req)

Credits: 1-6

Grading Method: Regular, Audit

Master's, EDMS majors, or doctoral candidates who desire to pursue special research problems under the direction of their advisors may register for credit under this number.

Prerequisite: permission of department.

Contact department for information to register for this course.

EDMS799 **Master's Thesis Research**

Credits: 1-6

Grading Method: Regular

Registration required to the extent of 6 credits.

Contact department for information to register for this course.

EDMS889 **Internship in Measurement and Statistics**

Credits: 3-8

Grading Method: Regular, Audit

Provides internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Contact department for information to register for this course.

EDMS898 **Pre-Candidacy Research**

Credits: 1-8

Grading Method: Regular

Contact department for information to register for this course.

EDMS899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6

Grading Method: Regular

Registration required to the extent of 12 credits.

Contact department for information to register for this course.

EDSP Education, Special Spring 2019

EDSP210 **Introduction to Special Education**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DVUP

Restriction: Sophomore standing or lower. Credit only granted for: EDSP210 or EDSP470.

Characteristics and needs of individuals receiving special education an related services. Current issues and practices in special education.

0101	Dawn Martin MW 10:00am - 11:15am	Seats (Total: 10) ARC 1101
0201	Deanna Collins MW 12:30pm - 1:45pm	Seats (Total: 10) EDU 1107

EDSP211 **Introduction to Special Education**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVUP

Restriction: Sophomore standing or lower; and permission of EDUC-Counseling, Higher Education and Special Education department. Credit only granted for: EDSP210 or EDSP470.

An introduction to the field of special education. Students examine historical foundations, including legislation; review components necessary for effective service delivery; and develop an understanding of the role of collaboration and consultation with parents, school personnel and other professionals. In addition, students are introduced to the nature and characteristics of various disabilities and review current issues in the field including overrepresentation of minority students in special education, inclusion, and federal and state assessment mandates. Current topics are addressed including evidence-based practices, universal design for learning, and individualization and differentiation of instruction..

0101	Joan Lieber TuTh 2:00pm - 3:15pm	Seats (Total: 25) EDU 1315

EDSP220 **Disability in Community: Access, Accommodation, and Adaptation**

Credits: 3 | Grading Method: Regular | General Education: DSSP, DVCC

Examines the concept of disability in a variety of community settings. Drawing on classic and contemporary readings in psychology, sociology and special education, the course will couple conceptual and historical understanding of disability with first-hand service-learning experiences in the community. Students will develop a plan in several phases that encompasses principles of Universal Design for Living/Learning (UDL) to study and participate in community-based activities.

0101	Carolyn Fink Th 2:00pm - 3:30pm Class time/details on ELMs	Seats (Total: 24) EDU 3315 ONLINE

EDSP289I **Disability: From Stigma and Sideshow to Mainstream and Main Street**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SB, D	General Education: DSHS, DVUP, SCIS

0101	Peter Leone TuTh 9:30am - 10:45am	Seats (Total: 60) ESJ 1215

EDSP315 **Inclusive Instruction: Reading Methods II**

Credits: 3 Grading Method: Regular

Prerequisite: EDHD314 and EDHD425; and (EDHD419 or EDSP420). Corequisite: EDSP423 and EDHD431; and track 1: Must be concurrently enrolled in EDSP430 and EDSP433; OR Track 2: Must be concurrently enrolled in EDHD415 and EDHD424.

Focus on current research and methods of teaching reading in the primary grades. Examination of development of a balanced literacy program of children of all reading levels in inclusive early childhood classrooms. Students will learn to select and use a variety of evidence-based reading strategies and assessment tools for reading and writing instruction. Includes field experiences.

0101	Ana Taboada Barber M 1:00pm - 3:00pm Contact instructor or department for details.	Seats (Total: 35) EDU 2119

EDSP376 **Fundamentals of Sign Language**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DVCC

Receptive and expressive skills in American Sign Language. Examination of the causes of deafness, characteristics of deaf education, and aspects of the culture of the deaf community.

0101	Michael Dunham MW 6:15pm - 7:30pm *If interested in the course, please email at edsp-376@umd.edu with your name and UID#.*	Seats (Total: 30) KNI 1105

EDSP403 **Instruction of Students with Physical Disabilities**

Credits: 3	Grading Method: Regular, Audit

Prerequisite: EDSP400 or EDSP602. Also offered as: EDSP603. Credit only granted for: EDSP403 or EDSP603.

Assessment, curriculum, and instruction for students with physical disabilities. Focus on etiology, environmental and learning adaptations, and assistive technology.

0101	Frances Kohl	Seats (Total: 35)
	Tu 1:15pm - 4:00pm	EDU 1107

EDSP410 **Instruction of Students with Severe Disabilities II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Special Education program. Also offered as: EDSP614. Credit only granted for: EDSP410 or EDSP614.

Functional assessment, curriculum, and instruction related to academic and community functioning skills for students with severe disabilities.

0101	Sarah Mallory	Seats (Total: 35)
	M 4:15pm - 7:00pm	EDU 0220

EDSP415 **Assessment in Special Education**

Credits: 3 Grading Method: Regular, Audit

Recommended: STAT100; or SOCY201. Restriction: Must be in Special Education program. Also offered as: EDSP615. Credit only granted for: EDSP415, or EDSP615.

Knowledge and skills for understanding assessment process and interpretation of assessment data. Emphasis on psychometric aspects of assessment related to screening, eligibility, and program planning.

0101	Kelli Cummings	Seats (Total: 35)
	W 1:15pm - 4:00pm	CCC 1100

EDSP416 **Reading and Writing Instruction in Special Education I**

Credits: 3 Grading Method: Regular, Audit General Education: DSHU

Restriction: Must be in Special Education program. Also offered as: EDSP616. Credit only granted for: EDSP416 or EDSP616.

Assessment and instruction of reading and writing skills for students in special education.

0101	Dawn Martin M 1:15pm - 4:00pm	Seats (Total: 28) EDU 1315

EDSP423 **Assessment in Early Childhood Special Education**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Special Education program. Credit only granted for: EDSP423 or EDSP624.

Assessment procedures for infants and young children with disabilities, birth through grade 3.

0101	Joan Lieber TuTh 12:30pm - 1:45pm	Seats (Total: 35) EDU 2119

EDSP430 **Early Intervention: Early Childhood Special Education**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Special Education program. Credit only granted for: EDSP430 or EDSP631.

Intervention with infants and young children with disabilities. Focus on moderate and severe disabilities.

0101	Sandra Newcomb W 1:00pm - 3:00pm Contact instructor or department for details.	Seats (Total: 15) EDU 2101

EDSP433 **Families and Culture in Early Intervention (Birth-5)**

Credits: 3 Grading Method: Regular

Prerequisite: EDHD314 and EDHD425; and (EDHD419 or EDSP420). Corequisite: EDSP430, EDSP315, and EDHD431.

Provides students with the skills and information they need to work effectively with families of young children (birth to age 5) who have or are at risk for disabilities in early childhood or early intervention programs. Students will review current local, state and federal policies establishing the rights of families of infants and young children with disabilities to participate in decision making for their child. We will discuss relevant theoretical and research literature as well as the cultural and contextual issues involved in working with families of very young children. Includes field experiences.

0101	Paula Beckman W 10:00am - 12:00pm Contact instructor or department for details.	Seats (Total: 15) EDU 2101

EDSP470 **Introduction to Special Education**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVUP

Restriction: Must not have completed EDSP210. Credit only granted for: EDSP210 or EDSP470.

Designed to give an understanding of the needs of all types of exceptional children.

EC/ECSE majors should register for EDSP211.

0101	Dawn Martin MW 10:00am - 11:15am	Seats (Total: 40) ARC 1101
0201	Deanna Collins MW 12:30pm - 1:45pm	Seats (Total: 40) EDU 1107

EDSP476 **Communicating with Sign Language**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: EDSP376. Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department.

Intermediate level receptive/expressive skills in American Sign Language. Aspects of the culture, history, and research perspectives of the deaf community.

0101	Michael Dunham MW 5:00pm - 6:15pm *If interested in the course, please email at edsp476@umd.edu with your name and UID#.*	Seats (Total: 30) KNI 1105

EDSP485 **Assessment and Instruction in Mathematics in Special Education**

Credits: 3 | Grading Method: Regular, Audit

Restriction: Must be in Special Education program; or must be in one of the following programs (Special Education (Doctoral); Special Education (Master's)). Also offered as: EDSP683. Credit only granted for: EDSP485 or EDSP683.

Instructional methods and assessment in mathematics in special education.

0101	Gulnoza Yakubova Th 12:15pm - 3:00pm	Seats (Total: 28) EDU 3236

EDSP489 **Field Experiences in Special Education**

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Planned field experience in education-related activities. Credit not to be granted for experiences accrued prior to registration.

Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department.

Contact department for information to register for this course.

EDSP490 **Teacher Candidate Research Seminar in Special Education**

Credits: 3 Grading Method: Regular, Audit CORE: CS

Restriction: Must be in Special Education program.

Study of current issues and research concerning the education of students in special education.

0101	Frances Kohl Contact instructor or department for details.	Seats (Total: 30)
0201	Dawn Martin Contact instructor or department for details.	Seats (Total: 30)

EDSP495 **Internship II: Elementary/Middle Special Education**

Credits: 6-12 Grading Method: Sat-Fail

Corequisite: EDSP490. Restriction: Must be in Special Education program; or must be in one of the following programs (Special Education (Doctoral); Special Education (Master's)). Also offered as: EDSP695. Credit only granted for: EDSP 495 or EDSP 695.

Student teaching, full-time for 15 weeks, with elementary or middle school students with disabilities.

Students must pay a $750.00 lab fee.

0101	Stacey Williams Contact instructor or department for details.	Seats (Total: 25)

EDSP498 **Special Problems in Special Education**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Available only to education majors who have definite plans for individual study of approved problems. Credit according to extent of work.

Special education majors only.

Contact department for information to register for this course.

EDSP498B **Special Problems in Special Education; Career Development and Advising**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail

Available only to education majors who have definite plans for individual study of approved problems. Credit according to extent of work.

0101	Jessica Chew	Seats (Total: 9)
	Contact instructor or department for details.	

EDSP499 **Workshops, Clinics, and Institutes in Special Education**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

The following type of educational enterprise may be scheduled under this course heading: workshops conducted by the special education department (or developed cooperatively with other departments, colleges and universities) and not otherwise covered in the present course listing. Laboratories, and special education centers; institutes developed around specific topics or problems and intended for designated groups such as school superintendents, principals and supervisors.

0901	Peter Leone	Seats (Total: 5)
	Contact instructor or department for details.	

EDSP600 **Issues and Trends in Educating Individuals with Disabilities**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 9 credits in EDSP courses. Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department.

Examines research and practice relevant to the education of individuals with disabilities.

PLT1	Leslie Page-Voth	Seats (Total: 40)
	Class time/details on ELMs	ONLINE
	Restricted to students in Special Education for General Education Teachers in Inclusive Classrooms Certificate program. For more program information, go to - https://ter.ps/SPED	

EDSP603 **Instruction of Students with Physical Disabilities**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Special Education (Doctoral) program; or must be in Special Education (Master's) program. Also offered as: EDSP403. Credit only granted for: EDSP403 or EDSP603.

Assessment, curriculum, and instruction for students with physical disabilities. Focus on etiology, environmental and learning adaptations, and assistive technology.

0101	Frances Kohl	Seats (Total: 35)
	Tu 1:15pm - 4:00pm	EDU 1107

EDSP612 Transition Methods and Disability Systems

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of instructor.

Philosophical and historical foundatins of transition service delivery and current methods that comprise transition services for students with disabilities.

Contact department for information to register for this course.

EDSP614 Instruction of Students with Severe Disabilities II

Credits: 3 Grading Method: Regular

Restriction: Must be in Special Education (Master's) program. Credit only granted for: EDSP410 or EDSP614.

Functional assessment, curriculum, and instruction related to academic and community functioning skills for students with severe disabilities.

0101	Sarah Mallory	Seats (Total: 35)
	M 4:15pm - 7:00pm	EDU 0220

EDSP615 Evaluation and Measurement of Exceptional Children and Youth

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDSP600 and EDMS646; or permission of EDUC-Counseling, Higher Education and Special Education department. Also offered as: EDSP415. Credit only granted for: EDSP415 or EDSP615.

Deals with the understanding and interpretation of the results of psychological and educational tests applicable for use with exceptional children and youth.

0101	Kelli Cummings W 1:15pm - 4:00pm	Seats (Total: 35) CCC 1100

EDSP616 **Reading and Writing Instruction in Special Education I**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Special Education (Doctoral) program; or must be in Special Education (Master's) program. Also offered as: EDSP416. Credit only granted for: EDSP416 or EDSP616.

Assessment and instruction of reading and writing skills and strategies for students in special education.

0101	Dawn Martin M 1:15pm - 4:00pm	Seats (Total: 28) EDU 1315

EDSP670 **Single Subject Research Designs**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDSP600. Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department.

Design, application, and analysis of single subject research in special education classrooms across all disabilities.

0101	Gulnoza Yakubova Tu 4:15pm - 7:00pm	Seats (Total: 20) EDU 3233

EDSP673 **Evaluating Evidence-Based Practices in Special Education**

Credits: 3 Grading Method: Regular

Prerequisite: EDMS645. Recommended: EDSP670 and EDSP600. Credit only granted for: EDSP673 or EDSP798E. Formerly: EDSP798E.

Evaluating evidence-based practices in special education, by examining theoretical origins, use of causal designs, programmatic lines of research, and research syntheses to explore the development of what it means for an intervention to have the potential to significantly impact practice.

0101	Susan De La Paz M 4:15pm - 7:00pm Class time/details on ELMs	Seats (Total: 20) JMZ 0103 ONLINE

Class will be held in person on February 25, March 25 and May 13.

EDSP675 **Legal and Policy Foundations for Individuals with Disabilities**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department.

Regulatory and statutory foundations for public policies addressing the education of children and youth with disabilities.

0101	Philip Burke Th 4:15pm - 7:00pm	Seats (Total: 15) Location: TBA

EDSP683 **Assessment and Instruction in Mathematics in Special Education**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Special Education (Doctoral) program; or must be in Special Education (Master's) program. Also offered as: EDSP485. Credit only granted for: EDSP485 or EDSP683.

Instructional methods and assessment in mathematics in special education.

0101	Gulnoza Yakubova Th 12:15pm - 3:00pm	Seats (Total: 28) EDU 3236

EDSP690 **Teacher Candidate Research Seminar in Special Education**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Special Education (Doctoral) program; or must be in Special Education (Master's) program.

Required seminar for master's certification teacher candidates in special education focusing on research methods and applications with students having disabilities.

0101	Frances Kohl Contact instructor or department for details.	Seats (Total: 30)

0201	Dawn Martin	Seats (Total: 30)
	Contact instructor or department for details.	

EDSP695 **Graduate Internship II: Elementary/Middle Special Education**

Credits: 6-11 Grading Method: Regular, Audit

Corequisite: EDSP690. Recommended: Must be in Special Education (Master's) program EDSPM Special Education. Restriction: Must be in Special Education (Master's) program. Credit only granted for: EDSP495, EDSP695 or EDSP888A.

Student teaching, full-time for 15 weeks, with elementary or middle school students with disabilities.

Students must pay a $750.00 lab fee.

0101	Stacey Williams	Seats (Total: 25)
	Contact instructor or department for details.	

EDSP798 **Special Problems in Special Education**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Intended for Master's, AGS, or doctoral students in education who desire to pursue a research problem.

Special education majors only.

Contact department for information to register for this course.

EDSP799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Registration required to the extent of six hours for Master's thesis.

Special education majors only.

Contact department for information to register for this course.

EDSP872 **Theory and Empirical Design in Educational Research**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDMS645 and EDMS646; or permission of EDUC-Counseling, Higher Education and Special Education department. Restriction: Must be in Special Education (Doctoral) program. Credit only granted for: EDSP672 or EDSP872. Formerly: EDSP672.

Design and evaluation of quantitative research in special education across disabilities and ages.

0101	Kelli Cummings	Seats (Total: 10)
	W 4:15pm - 7:00pm	EDU 1107

EDSP888 **Apprenticeship in Special Education**

(Perm req)

Credits: 1-8 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate- seeking graduate students.

Contact department for information to register for this course.

EDSP888A **Apprenticeship in Special Education; Apprenticeship in College Teaching**

Credits: 3 Grading Method: Regular

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate- seeking graduate students.

Contact department for information to register for this course.

EDSP889 **Internship in Special Education**

(Perm req)

Credits: 3-8 Grading Method: Regular, Audit

Internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Special education majors only.

Contact department for information to register for this course.

EDSP898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EDSP899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Registration required to the extent of 6-9 hours for an Ed.D. Project and 12-18 hours for a Ph.D. dissertation.

Special education majors only.

Contact department for information to register for this course.

EDUC Education Spring 2019

EDUC388 **Special Topics in Education; Guided Experiences in College Teaching**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restricted to students approved as undergraduate teaching assistants. Section 0101 is reserved for standard UTA program and should be taken concurrently with EDUC498, 0101 for one credit.

0201	Sharon Vanwright	Seats (Total: 20)
	Contact instructor or department for details. Contact instructor or department for details.	
	Relates to Academic Achievement Program- should be taken concurrently w th EDCI 498, Section 6601.	

EDUC388C **Special Topics in Education; Guided Experience in Teaching for Peer Educators**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

0101	Stacia Woycheck, Alicia Thomas	Seats (Total: 15)
	Meets March 25, 2019 - May 13, 2019	
	Contact instructor or department for details.	

EDUC388T **Special Topics in Education; Guided Experiences in College Teaching - UTA**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

0101	Jessica Haddaway	Seats (Total: 25)
	M 5:00pm - 7:00pm	KNI 1103
	Contact instructor or department for details.	

EDUC498 **Selected Topics in Education**

(Perm req)

Credits: 1 Grading Method: Regular

Current topics and issues in education.

0101	Jessica Haddaway	Seats (Total: 60)
	Contact instructor or department for details.	

EDUC640 **Introduction to Educational Leadership**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI640 or EDUC640. Formerly: EDHI640.

The focus of this course is the analysis of the role of education administrators/leaders in the social, political, and legal contexts of schools. Also examines the role of leadership in school improvement.

Contact department for information to register for this course.

EDUC646 **Leading Instructional Excellence**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDUC645; or permission of instructor. Credit only granted for: EDHI646 or EDUC646. Formerly: EDHI646.

Leader's role in fostering high quality teaching and learning. Exploration of the relationship between curriculum instruction assessment and the organizational structure of K-12 public schooling. Development and assessment of frameworks for understanding instructional quality. Analysis of strategies for supporting teachers as they engage in curricular and professional development. Consideration of factors involved in creating and sustaining instructionally centered schools.

Contact department for information to register for this course.

EDUC701 **Applied Research and Data Based Decision Making for School Leaders**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of EDUC-College of Education. Credit only granted for: EDUC701 or EDHI701. Formerly: EDHI701.

This course focuses on understanding school system data including student assessments, teacher and administrator evaluations and other program data. Ed.D. students will learn to evaluate the technical characteristics and implications for use of such data as well as how to design instruments to collect needed data.

Contact department for information to register for this course.

EDUC740 **Managing Educational Organizations in a Diverse Society**

Credits: 4 Grading Method: Regular, Audit

Restriction: Permission of EDUC-College of Education. Credit only granted for: EDUC740 or EDHI740. Formerly: EDHI740.

Contemporary social and cultural influences that impact on the management of schools and school systems in a diverse society. The effects on schools and school systems of changes in the economy, family structure, demographics and technology will be examined.

Contact department for information to register for this course.

EDUC747 **Advanced Seminar on Instructional Improvement for School Leaders**

Credits: 4 Grading Method: Regular, Audit

Restriction: Permission of EDUC-College of Education. Credit only granted for: EDUC747 or EDHI747. Formerly: EDHI747.

Course addresses current issues, research, trends, and problems in the areas of instructional improvement and the responsibilities of school-based administrators in improving student learning.

Contact department for information to register for this course.

EDUC760 **The Human Dimension in Administration**

Credits: 4 Grading Method: Regular, Audit

Restriction: Permission of EDUC-College of Education. Credit only granted for: EDUC760 or EDHI760. Formerly: EDHI760.

Course focuses on theory, research findings, and current practices in managing human resources in educational organizations. Issues related to performance evaluations, professional development, and legal and ethical standards are addressed.

Contact department for information to register for this course.

EDUC769 **System Innovation and Transformation**

Credits: 4 Grading Method: Regular, Audit

Course is designed to provide EdD students understanding how complex systems improve performance and connect educational and social objectives to goals of innovation and efficiency.

Contact department for information to register for this course.

EDUC888 **Applied Apprenticeship in Education**

Credits: 1-3 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals.

PGCPS II EdD Outreach Program. Registration restricted to program participants.

IH42	Patricia Richardson Contact instructor or department for details. *PGCPS II EdD Outreach Program. Registration restricted to program participants.*	Seats (Total: 16)
IH81	Margaret McLaughlin Contact instructor or department for details. *PGCPS III EdD Outreach Program. Registration restricted to program participants.*	Seats (Total: 10)
IH82	Patricia Richardson Contact instructor or department for details. *AA/SMC EdD Program. Registration restricted to program participants. Restriction: Department permission required.*	Seats (Total: 4)
IH84	David Imig Contact instructor or department for details. *AA/SMC EdD Program. Registration restricted to program participants. Restriction: Department permission required.*	Seats (Total: 4)

EDUC888D **Applied Apprenticeship in Education; Educational Politics**

Credits: 1 Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals.

Contact department for information to register for this course.

EDUC898 **Pre-Candidacy Research**

Credits: 2-4 Grading Method: Regular

Pre-Candidacy Research

Contact department for information to register for this course.

EDUC899 **Dissertation of Practice Research**

(Perm req)

Credits: 6 Grading Method: Regular, Audit

Registration required to the extent of 6-9 hours for an Ed.D. Dissertation.

Contact department for information to register for this course.

ENAE Engineering, Aerospace Spring 2019

ENAE200 **Aerospace Engineering Profession II**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Recommended: ENAE100. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Overview of the engineering profession as it pertains to the role of the engineer in society, professional practice and ethical standards, career development, opportunities and need for lifelong learning, importance of safety and standards, effective written, visual, and oral communications, and the impact of the engineering profession on global issues.

0101	Kevin Lewy, Norman Wereley Tu 2:00pm - 3:15pm Tu 11:00am - 11:50am	Seats (Total: 25) EGR 1202 KEB 2107	 Lab
0102	Norman Wereley, Kevin Lewy Tu 2:00pm - 3:15pm W 11:00am - 11:50am	Seats (Total: 35) EGR 1202 KEB 2111	 Lab
0103	Norman Wereley, Kevin Lewy Tu 2:00pm - 3:15pm Th 11:00am - 11:50am	Seats (Total: 25) EGR 1202 KEB 2107	 Lab

ENAE202 **Computing Fundamentals for Engineers**

(Perm req)

Credits: 3 Grading Method: Regular

Corequisite: Must be concurrently enrolled in MATH141. Restriction: Permission of ENGR-Aerospace Engineering department. Credit only granted for: ENAE202 or ENME202.

Introduction to computational tools for the solution of engineering problems. C++ & MATLAB programming including branching and loops, functions, file handling, arrays, and data structures. Students will be introduced to object-oriented programming, basic computing, algorithms, and principles of software engineering.

0101	Robert Sanner MW 1:00pm - 1:50pm Th 3:00pm - 5:00pm	Seats (Total: 24) EGR 1202 KEB 2107	 Lab
0102	Robert Sanner MW 1:00pm - 1:50pm F 3:00pm - 5:00pm	Seats (Total: 24) EGR 1202 EGR 0312	 Lab

0103	Robert Sanner MW 1:00pm - 1:50pm Th 1:00pm - 3:00pm	Seats (Total: 24) EGR 1202 KEB 2107	 Lab
0104	Robert Sanner MW 1:00pm - 1:50pm F 1:00pm - 3:00pm	Seats (Total: 24) EGR 1202 EGR 0312	 Lab
0105	Robert Sanner MW 1:00pm - 1:50pm Th 3:00pm - 5:00pm	Seats (Total: 24) EGR 1202 EGR 0312	 Lab
0106	Robert Sanner MW 1:00pm - 1:50pm F 3:00pm - 5:00pm	Seats (Total: 24) EGR 1202 KEB 2107	 Lab

ENAE324 **Aerospace Structures**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220. Restriction: Must be in Engineering: Aerospace program.

Analysis of torsion, beam bending, plate bending, buckling and their application to aerospace.

0101	Olivier Bauchau MW 10:00am - 10:50am F 11:00am - 12:50pm	Seats (Total: 55) EGR 1108 EGR 1108	 Discussion
0201	Mary Bowden MW 11:00am - 11:50am F 11:00am - 12:50pm	Seats (Total: 55) EGR 0108 EGR 0108	 Discussion
0301	Alfonso Callejo MW 10:00am - 10:50am F 11:00am - 12:50pm	Seats (Total: 55) KEB 1200 KEB 1200	 Discussion

ENAE398H **Honors Research Project**

(Perm req)

Credits: 1-3 Grading Method: Regular

Planned sequence of steps in aerospace honors research in which student take three (3) consecutive semesters of this course in partial fulfillment of aerospace engineering honors program requirements. The first semester consists of a series of seminars and meetings with faculty mentors on honors research; two semesters consist of undergraduate honors research project and paper conducted under the direction of an aerospace engineering faculty member to be presented at a conference.

Contact department for information to register for this course.

ENAE404 **Space Flight Dynamics**

Credits: 3 Grading Method: Regular

Prerequisite: ENAE301. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Three-dimensional motion under central fields. Solutions to orbital motion, orbital elements, time elements. Kepler's laws. Orbital maneuvering, rendezvous and station-keeping. Rigid-body attitude dynamics, spacecraft attitude dynamics.

0101	Christine Hartzell	Seats (Total: 97)
	TuTh 9:30am - 10:45am	KEB 1110

ENAE414 **Aerodynamics II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENAE311. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department. And junior standing or higher.

Aerodynamics of inviscid incompressible flows. Aerodynamic forces and moments. Fluid statics/buoyancy force. Vorticity, circulation, the stream function and the velocity potential. Bernoulli's and Laplace's equations. Flows in low speed wind tunnels and airspeed measurement. Potential flows involving sources and sinks, doublets, and vortices. Development of the theory of airfoils and wings.

0101	Anya Jones	Seats (Total: 75)
	TuTh 9:30am - 10:45am	CHE 2108

ENAE420 **Computational Structural Mechanics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220 and MATH241; and must have completed a course in linear algebra. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Introductory of finite element methods for aerospace engineering modeling and analysis; equips students with ability to understand manuals of commercial finite element analysis software.

0101	Sung Lee TuTh 12:30pm - 1:45pm	Seats (Total: 20) EGR 1102	

ENAE425 **Mechanics of Composite Structures**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH246, ENAE324, ENES220, and MATH241.

Introduction to structures composed of composite materials and their applications in aerospace. In particular, filamentary composite materials are studied. Material types and fabrication techniques, material properties, micromechanics, anisotropic elasticity, introduction to failure concepts.

0101	Norman Wereley, Andrew Becnel MWF 10:00am - 10:50am	Seats (Total: 30) PHY 4221	

ENAE432 **Control of Aerospace Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ENAE301 and ENAE283. Restriction: Junior standing or higher; and must be in Engineering: Aerospace program.

An introduction to the feedback control of dynamic systems. Laplace transforms and transfer function techniques; frequency response and Bode diagrams. Stability analysis via root locus and Nyquist techniques. Performance specifications in time and frequency domains, and design of compensation strategies to meet performance goals.

0101	Robert Sanner MWF 9:00am - 9:50am M 1:00pm - 1:50pm	Seats (Total: 40) EGR 1202 EGR 2154	Discussion
0102	Robert Sanner MWF 9:00am - 9:50am M 2:00pm - 2:50pm	Seats (Total: 40) EGR 1202 PHY 0405	Discussion
0103	Robert Sanner MWF 9:00am - 9:50am W 1:00pm - 1:50pm	Seats (Total: 40) EGR 1202 EGR 0135	Discussion

0104	Robert Sanner MWF 9:00am - 9:50am W 1:00pm - 1:50pm	Seats (Total: 40) EGR 1202 ITV 1111	 Discussion

ENAE464 **Aerospace Engineering Laboratory**

Credits: 3 Grading Method: Regular

Prerequisite: ENAE324, ENAE362, ENAE311, and ENAE432. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Application of fundamental measuring techniques to measurements in aerospace engineering. Includes experiments in aerodynamics, structures, propulsion, flight dynamics and astrodynamics. Correlation of theory with experimental results.

0101	Allen Winkelmann MW 11:00am - 11:50am M 2:00pm - 5:00pm	Seats (Total: 16) JMP 3201 EGL 0121	 Lab
0102	Allen Winkelmann MW 11:00am - 11:50am Tu 2:00pm - 5:00pm	Seats (Total: 16) JMP 3201 EGL 0121	 Lab
0103	Allen Winkelmann MW 11:00am - 11:50am W 2:00pm - 5:00pm	Seats (Total: 16) JMP 3201 EGL 0121	 Lab
0105	Allen Winkelmann MW 11:00am - 11:50am Tu 8:00am - 11:00am	Seats (Total: 16) JMP 3201 EGL 0121	 Lab
0201	Andrew Becnel MW 11:00am - 11:50am Th 2:00pm - 5:00pm	Seats (Total: 24) CHE 2118 EGR 3102	 Lab
0202	Andrew Becnel MW 11:00am - 11:50am F 2:00pm - 5:00pm	Seats (Total: 25) CHE 2118 EGR 2116	 Lab

ENAE471 **Aircraft Flight Testing**

Credits: 3 Grading Method: Regular

Prerequisite: ENAE414. Corequisite: ENAE403. Restriction: Must be in Engineering: Aerospace program.

Provides basic instruction to aircraft flight testing and demonstrates need for systematic, well-proven technique to allow for accurate airplane performance. Concepts of aerodynamics, airplane performance, and stability and control. Emphasis on single-engine general aviation type aircraft.

0101	John Tritschler TuTh 2:00pm - 3:15pm	Seats (Total: 20) JMP 2216

ENAE482 Aeronautical Systems Design

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: ENAE455, ENAE423, ENAE403, and ENAE481. Restriction: Must be in Engineering: Aerospace program; and senior standing or higher.

Senior capstone design course in the aeronautics track. Introduction of computerized methods for sizing and performance analysis. More comprehensive methods to predict weight, aerodynamics and propulsion system characteristics. Consideration in design disciplines such as vulnerability, maintainability, produceability, etc. Groups of students will complete, brief and report on a major design study to specific requirements.

0101	Dominic Palumbo MWF 1:00pm - 1:50pm	Seats (Total: 30) EGR 0108
0201	Sung Lee MW 5:00pm - 6:15pm *This section is restricted to students on the Design, Build, Fly team and requires permission from the department to enroll.*	Seats (Total: 16) EGR 2116
0301	James Baeder, Vengalattore Nagaraj MW 3:30pm - 4:45pm *This section is restricted to students in the AHS Helicopter Design Competition and requires permission of the department to enroll.*	Seats (Total: 10) EGR 3111

ENAE484 Space Systems Design

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: ENAE423, ENAE483, ENAE441, and ENAE457. Restriction: Must be in Engineering: Aerospace program.

Senior capstone design course in the space track. Group preliminary design of a space system, including system and subsystem design, configuration control, costing, risk analysis, and programmatic development. Course also emphasizes written and oral engineering communications.

0101	Andrew Becnel, David Akin, Mary Bowden TuTh 11:00am - 12:15pm	Seats (Total: 32) AJC 2119
0102	Andrew Becnel, David Akin, Mary Bowden TuTh 11:00am - 12:15pm	Seats (Total: 36) AJC 2134

ENAE488C **Topics in Aerospace Engineering; Computational Fluid Dynamics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Technical elective taken with the permission of the student's advisor and instructor. Lecture and conference courses designed to extend the student's understanding of aerospace engineering. Current topics are emphasized.

Prerequisite: ENAE 311; ENAE 202; MATH 240, 246; Computer programming experience either in MATLAB, FORTRAN, C++, or Python Restriction: Must be in Engineering: Aerospace program. An introduction to Computational Fluid Dynamics (CFD), with an emphasis on the application of CFD to predict fluid flow behavior for basic and moderately complex geometries. Introduces students to the entire process of CFD from grid generation, application of CFD solvers, and post-processing using state-of-the-art commercial software. Finite difference and finite volume methods, explicit and implicit schemes, solutions of elliptic, parabolic, and hyperbolic equations. Additionally, students will be provided with a fundamental understanding that will enable them to choose the right CFD tools, evaluate, and CFD results.

0101	Ashish Nedungadi Th 4:00pm - 6:30pm	Seats (Total: 15) PLS 1115

ENAE488F **Topics in Aerospace Engineering; Introduction to Aviation for Pilot Training**

Credits: 3 Grading Method: Regular

Technical elective taken with the permission of the student's advisor and instructor. Lecture and conference courses designed to extend the student's understanding of aerospace engineering. Current topics are emphasized.

Class will meet off campus at the College Park Airport-Conference Room A. Prerequisite: ENAE283 or permission of department. Restriction: Must be in Engineering: Aerospace program. Introduction to how pilots view the design of an aerospace vehicle. Topics include aerodynamic principles, pilot training, flight instruments, flight maneuvers, aeronautical charts and communication, aviation weather, & airplane performance and navigation.

0101	Daniel George Tu 7:00pm - 9:30pm	Seats (Total: 35) Location: TBA

ENAE499 **Elective Research**

(Perm req)

Credits: 3 Grading Method: Regular

Undergraduate research project and paper conducted under the direction of an aerospace engineering faculty member to be presented at a conference or competition.

Contact department for information to register for this course.

ENAE602 **Spacecraft Attitude Dynamics and Control**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE404 and ENAE432.

Rigid body rotational dynamics of spacecraft; forced and unforced motion, torques produced by the orbital environment; orbit/attitude coupling; gas jet, momentum wheel, and magnetic torque actuators. Elementary feedback attitude regulators and algorithms for linear and nonlinear attitude tracking.

0101	Jason Mitchell TuTh 5:30pm - 6:45pm	Seats (Total: 20) CHE 2145

ENAE633 **Helicopter Dynamics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE631. Or permission of ENGR-Aerospace Engineering department; and permission of instructor.

Flap dynamics. Mathematical methods to solve rotor dynamics problems. Flap-lag-torsion dynamics and identify structural and inertial coupling terms. Overview on rotary wing unsteady aerodynamics. Basic theory of blade aeroelastic stability and ground and air resonance stability, vibration analyses and suppression.

0101	Anubhav Datta TuTh 9:30am - 10:45am	Seats (Total: 20) EGR 3102

ENAE634 **Helicopter Design**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE631. Or permission of ENGR-Aerospace Engineering department; and permission of instructor.

Principles and practice of the preliminary design of helicopters and similar rotary wing aircrafts. Design trend studies, configuration selection and sizing methods, performance and handling qualities analyses, structural concepts, vibration reduction and noise. Required independent design project conforming to a standard helicopter request for proposal (RFP).

0101	Inderjit Chopra	Seats (Total: 15)
	F 9:00am - 1:30pm	Location: TBA

ENAE646 **Advanced Dynamics of Aerospace Systems**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE301. Credit only granted for: ENAE788G or ENAE646. Formerly: ENAE788G.

Introduces the principles and methods for formulating and analyzing mathematical models of aerospace systems using Newtonian, Lagrangian, and Hamiltonian formulations of particle and rigid body dynamics. Additional topics include applied dynamical systems, geometric mechanics, and symmetry and reduction.

0101	Derek Paley, William Craig	Seats (Total: 18)
	TuTh 11:00am - 12:15pm	AJC 2121

ENAE652 **Computational Structural Mechanics**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of instructor; and permission of ENGR-Aerospace Engineering department. Credit only granted for: ENME 674, ENAE652, ENPM652 or ENPM808F.

Fundamentals of structural mechanics and computational modeling. Finite element modeling of two- and three-dimensional solids, plates and shells. Geometrically nonlinear behavior. Structural stability such as buckling and postbuckling.

0101	Sung Lee	Seats (Total: 20)
	MW 3:30pm - 4:45pm	EGR 1102

ENAE654 **Mechanics of Composite Structures**

Credits: 3 Grading Method: Regular

An introduction to structures composed of composite materials and their applications in aerospace. In particular, filamentary composite materials are studied. Material types and fabrication techniques, material properties, micromechanics, anisotropic elasticity, introduction to failure concepts.

0101	Andrew Becnel, Norman Wereley	Seats (Total: 25)
	MWF 10:00am - 10:50am	PHY 4221

ENAE656 **Aeroelasticity**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE655. Restriction: Permission of ENGR-Aerospace Engineering department.

Topics in aeroelasticity: wing divergence; aileron reversal; flexibility effects on aircraft stability derivatives; wing, empennage and aircraft flutter; panel flutter; aircraft gust response; and aeroservoelasticity of airplanes.

0101	David Haas	Seats (Total: 20)
	F 2:00pm - 5:00pm	EGR 1102

ENAE665 **Advanced Airbreathing Propulsion**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE674 and ENAE455; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor.

Advanced treatment of airbreathing propulsion technologies, propulsion system analysis, and engine/airframe integration. Topics will vary, but may include novel engine cycles, advanced gas turbine systems, pulsed systems, and high-speed engines, including scramjets and combined cycle systems.

0101	Kenneth Yu	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	JMP 1202

ENAE667 **Advanced Space Propulsion and Power**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE663. Restriction: Permission of instructor.

Advanced treatment of selected space propulsion and power technologies, methods of analysis and performance estimation. Topics will vary each year as time permits, but may include cold gas systems, chemical, nuclear, arcjets, beamed energy, and electric propulsion systems, as well as other advanced concepts.

0101	Raymond Sedwick W 4:00pm - 6:30pm	Seats (Total: 15) EGR 3102

ENAE674 **Aerodynamics of Compressible Fluids**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-Aerospace Engineering department.

One-dimensional flow of a perfect compressible fluid. Shock waves. Two-dimensional linearized theory of compressible flow. Two-dimensional transonic and hypersonic flows. Exact solutions of two-dimensional isotropic flow. Linearized theory of three-dimensional potential flow. Exact solution of axially symmetrical potential flow. One-dimensional flow with friction and heat addition.

0101	Christopher Cadou TuTh 12:30pm - 1:45pm	Seats (Total: 25) EGR 3102

ENAE676 **Turbulence**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE673. Recommended: ENAE674.

Physical and statistical descriptions of turbulence; review of phenomenological theories for turbulent flows; scales of motion; correlations and spectra; homogeneous turbulent flows; inhomogeneous shear flows; turbulent flows in pipes and channels; turbulent boundary layers; theory of methods for turbulent flows (Reynolds stress equations, LES, DES, DNS); experimental methods for turbulence measurements.

0101	Pino Martin MW 9:30am - 10:45am	Seats (Total: 10) JMP 2216
SG01	Pino Martin TuTh 9:30am - 10:45am	Seats (Total: 5) Location: TBA
SM01	Pino Martin TuTh 9:30am - 10:45am	Seats (Total: 5) Location: TBA

TV01	Pino Martin MW 9:30am - 10:45am	Seats (Total: 5) JMP 2216

ENAE683 **High Temperature Gas Dynamics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-Aerospace Engineering department.

Aspects of physical chemistry and statistical thermodynamics necessary for the analysis of high temperature flows, equilibrium and nonequilibrium chemically reacting flows, shock waves, nozzle flows, viscous chemically reacting flow, blunt body flows, chemically reacting boundary layers, elements of radiative gas dynamics and applications to hypersonic vehicles.

0101	Stuart Laurence TuTh 3:30pm - 4:45pm	Seats (Total: 15) EGR 3111

ENAE685 **Computational Fluid Dynamics II**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE684. Restriction: Permission of ENGR-Aerospace Engineering department.

Continuation of ENAE 684. Basic algorithms for the numerical solution of two and three dimensional inviscid and viscous flows. Applications to internal and external flow problems.

0101	James Baeder TuTh 11:00am - 12:15pm	Seats (Total: 20) JMP 2222
SG01	James Baeder TuTh 11:00am - 12:15pm	Seats (Total: 5) Location: TBA
SM01	James Baeder TuTh 11:00am - 12:15pm	Seats (Total: 5) Location: TBA
TV01	James Baeder TuTh 11:00am - 12:15pm	Seats (Total: 5) Location: TBA

ENAE691 **Satellite Design**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE483.

Systems design of Earth-orbiting satellites, including geostationary communications satellites and low Earth orbit constellations. Basics of orbital motion, communications, and instrument design. Spacecraft systems, structural design, thermal design, power generation, and attitude determination and control. Launch vehicle interfacing and mission operations.

0101	Charles Wildermann W 6:30pm - 9:00pm	Seats (Total: 35) EGR 2154

ENAE697 **Space Human Factors and Life Support**

Credits: 3 Grading Method: Regular, Audit

Engineering requirements supporting humans in space. Life support design: radiation effects and mitigation strategies; requirements for atmosphere; water, food, and temperature control. Accommodations for human productivity in space: physical and psychological requirements; work station design; and safety implication of system architectures. Design and operations for extra-vehicular activity.

0101	David Akin MW 2:00pm - 3:15pm	Seats (Total: 20) JMP 2222
SG01	David Akin MW 2:00pm - 3:15pm	Seats (Total: 5) Location: TBA
SM01	David Akin MW 2:00pm - 3:15pm	Seats (Total: 5) Location: TBA
TV01	David Akin MW 2:00pm - 3:15pm	Seats (Total: 5) Location: TBA

ENAE741 **Interplanetary Navigation and Guidance**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE601 and ENAE432.

Interplanetary trajectory construction; patched and multiconic techniques. Methods of orbit and attitude determination; applied Kalman filtering. Guidance algorithms and B-plane targeting. Interplanetary navigation utilizing in situ and radio techniques.

0101	Brent Barbee	Seats (Total: 20)
	TuTh 5:00pm - 6:15pm	EGR 1102

ENAE788E **Selected Topics in Aerospace Engineering; Electro-Mechanical System Modeling**

Credits: 3 Grading Method: Regular, Audit

Prereq: ENAE423 or equivalent. Analysis techniques for simulating resonances and impedances in systems that couple physical interactions electrical, mechanical, magnetic and piezoelectric domains. Analysis applied to modeling the electro-magneto-mechano-acoustic domain interactions in traditional loud speaker designs, and can be extended to design of sensors, energy harvesters and actuators.

0101	Norman Wereley, Alison Flatau	Seats (Total: 15)
	Th 4:30pm - 7:00pm	ATL 1106

ENAE788L **Selected Topics in Aerospace Engineering; Optimal Estimation of Dynamic Systems**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENAE404 or equivalent, ENAE441 recommended. Optimal estimation or orbit and attitude of spacecraft. Probability concepts in dynamic systems including measurement and modeling uncertainty. Filtering and smoothing for spacecraft navigation and other aerospace applications. Parameter and state estimation applications.

0101	Liam Healy	Seats (Total: 20)
	TuTh 9:30am - 10:45am	JMP 1109

ENAE788T **Selected Topics in Aerospace Engineering; Introduction to Power Beaming and Space Solar**

Credits: 3 Grading Method: Regular, Audit

Credit granted for ENAE788A and ENAE788J or ENAE788T. Fundamentals of space solar, including: overview and concepts of space solar; energy collection methods (photovoltaics, thermal engines, sun-pumped lasers); wireless power transmission (microwave, laser, reflection); space solar implementation architectures; space systems design; large space structures and space robotics; phased array antennas, retrodirective beam control, rectenna theory and design; safety, regulatory, and societal issues; application contexts; and space and energy economics.

0101	Paul Jaffe	Seats (Total: 20)
	Tu 7:30pm - 10:00pm	EGR 0135

ENAE788V **Selected Topics in Aerospace Engineering; Motion Planning for Autonomous Systems**

Credits: 3 Grading Method: Regular, Audit

Recommended: completion of mid-level programming course Autonomous systems (e.g., aircraft, vehicles, manipulators, and robots) must plan long-term movement that respects environmental constraints such as obstacles, other actors, and wind; system constraints such as kinematics, dynamics, and fuel; as well as factors such as time and safety. Robust autonomy also requires dealing with environmental changes, new information, and uncertainty. This course provides an overview of such problems and the methods used to solve them.

0101	Michael Otte TuTh 2:00pm - 3:15pm	Seats (Total: 15) JMP 2120
SG01	Michael Otte TuTh 2:00pm - 3:15pm	Seats (Total: 5) Location: TBA
SM01	Michael Otte TuTh 2:00pm - 3:15pm	Seats (Total: 5) Location: TBA
TV01	Michael Otte TuTh 2:00pm - 3:15pm	Seats (Total: 5) Location: TBA

ENAE799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ENAE898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENAE899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ENCE Engineering, Civil Spring 2019

ENCE100 **Introduction to Civil and Environmental Engineering**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

An overview of the department of Civil and Environment Engineering. Students are introduced to the undergraduate curriculum and will be exposed to other undergraduate and graduate students at various points in their program. The course blends panel presentations by seniors and graduate students, faculty and practitioners with a project and book review to be performed by the students.

0101	Kaye Brubaker F 1:00pm - 1:50pm	Seats (Total: 100) EGR 1202

ENCE200 **Civil Engineering Computation**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES100, MATH141, and ENES102; and permission of ENGR-Civil & Environmental Engineering department. Credit only granted for: ENCE200 or ENCE202. Formerly: ENCE202.

Development of knowledge and skills in managing, analyzing, interpreting, and communicating spatial information. Computer Aided Drawing (CAD) and Geographic Information Systems (GIS) are introduced in the context of civil and environmental engineering applications.

0101	Frank White, Michael Humber MW 2:00pm - 3:15pm	Seats (Total: 37) EGR 1156
0201	Michael Humber, Frank White MW 3:30pm - 4:45pm	Seats (Total: 37) EGR 1156

ENCE201 **Engineering Information Processing**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENES220 and MATH241; and permission of ENGR-Civil & Environmental Engineering department. Corequisite: MATH246. Credit only granted for: ENCE201 or ENCE203.

Exploration of algorithms for solving problems in several important areas of numerical computing: roots of equations; matrix algebra and the systems of linear equations; function approximation, numerical differentiation and integration; and ordinary differential equations. Issues of solution accuracy, robustness, and efficiency are also considered. Numerical techniques are presented in the context of engineering applications, and example problems are solved using a variety of computer-based tools (primarily MATLAB).

0101	Peter Chang MWF 2:00pm - 2:50pm	Seats (Total: 35) KEB 1110
0201	Barton Forman MWF 2:00pm - 2:50pm	Seats (Total: 35) EGR 2154

ENCE215 **Engineering for Sustainability**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM135; and permission of ENGR-Civil & Environmental Engineering department.

Engineers have a key role to play in planning, designing, building, and ensuring a sustainable future. In this class, a problem-based approach is used to examine fundamentally-based analyses and approaches for engineering as sustainable society, with a focus on sustainable use of energy and materials, sustainable infrastructure solutions, atmospheric sustainability and sustainable water supply, and human population growth and resource consumption and its implications for sustainability.

0101	Natasha Almeida e Andrade TuTh 9:30am - 10:45am	Seats (Total: 35) EGR 0135	
0201	Natasha Almeida e Andrade TuTh 2:00pm - 3:15pm	Seats (Total: 35) EGR 1104	

ENCE300 **Fundamentals of Engineering Materials**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220; and permission of ENGR-Civil & Environmental Engineering department.

Behavior, physical, mechanical and chemical properties, design and performance of civil engineering materials, including aggregates, cement, concrete, asphalt binders and mixtures, plastics and geosynthetics, timber, metals and alloys. Modified and advanced highway materials (polymer and rubber modified mixtures, high performance concrete, composites, smart materials). Laboratory testing with hands-on experience on aggregates, Portland cement concrete, asphalt mixtures, timber and metals as per SUPERAVE, ACI design methods, and ASTM standards and specifications.

0101	Dimitrios Goulias, Setare Ghahri Saremi Tu 12:30pm - 2:30pm Th 10:30am - 12:30pm	Seats (Total: 18) SQH 1120 EGL 0147	 Lab
0102	Dimitrios Goulias, Setare Ghahri Saremi Tu 12:30pm - 2:30pm Th 12:30pm - 2:30pm	Seats (Total: 18) SQH 1120 EGL 0147	 Lab
0201	Anjuman Akhter, Dimitrios Goulias Tu 12:30pm - 2:30pm Th 2:30pm - 4:30pm	Seats (Total: 18) SQH 1120 EGL 0147	 Lab

0202	Dimitrios Goulias, Anjuman Akhter Tu 12:30pm - 2:30pm Th 4:30pm - 6:30pm	Seats (Total: 18) SQH 1120 EGL 0147	 Lab

ENCE302 **Probability and Statistics for Civil and Environmental Engineers**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: MATH246 and ENCE201; and permission of ENGR-Civil & Environmental Engineering department.

Statistics is the science of data. Civil Engineers must often make decisions based on incomplete, variable or uncertain information. In addition, modern methods of design and analysis need to account for variability in natural, engineered and human systems. After successful completion of this class, a student should have facility and familiarity with established basic techniques for managing data, modeling variability and uncertainty, communicating about data and decisions, and supporting or defending a decision or judgment based on uncertain or incomplete data.

0101	Allison Reilly, Michelle Bensi MWF 2:00pm - 2:50pm	Seats (Total: 40) EGR 1202
0102	Allison Reilly, Michelle Bensi MWF 2:00pm - 2:50pm	Seats (Total: 40) EGR 1104

ENCE305 **Fundamentals of Engineering Fluids**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220, PHYS260, and PHYS261; and permission of ENGR-Civil & Environmental Engineering department. Credit only granted for: ENCE305 or ENCE330. Formerly: ENCE330.

The theoretical bases for fluid statics and dynamics, including the conservation of mass, energy and momentum. Modeling of hydraulic systems are introduced. Emphasis on pipe flow and open-channel hydraulics, with real-world applications.

0201	Barton Forman MWF 10:00am - 10:50am	Seats (Total: 43) EGR 3106
0301	Richard McCuen MWF 10:00am - 10:50am	Seats (Total: 42) EGR 1104

ENCE310 **Introduction to Environmental Engineering**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS260 and ENCE215; and permission of ENGR-Civil & Environmental Engineering department.

Introduction to the physical, chemical and biological systems relating to the quality of water, land and air environments. Fundamental principles will be emphasized, current environmental pollution problems will be examined and methods of pollution abatement discussed.

0101	Guangbin Li	Seats (Total: 60)
	TuTh 8:00am - 9:15am	EGR 0108

ENCE320 **Introduction to Project Management**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering or in the Project Management Minor. Credit only granted for: ENCE320 or ENCE325.

Learn the fundamentals of project management and the analytical skills for the management side of engineering projects.Topics include economic analysis, project screening and selection, organizational and project structure, scheduling, budgeting, resource management, life cycle costing, and project control.

0101	Gregory Baecher	Seats (Total: 100)
	Th 5:00pm - 7:30pm	ESJ 1224
	Click here for syllabus.	

ENCE325 **Introduction to Construction Project Management**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in a major in ARCH-School of Architecture, Planning, & Preservation; or must be in the Construction Project Management minor. And permission of ENGR-Civil & Environmental Engineering department. Credit only granted for: ENCE 320 or ENCE 325.

Learn the basic topics in sourcing, planning, financing, designing, contracting, constructing and operating buildings and other facilities in the built infrastructure. Topics include construction economics, design constructability reviews, construction process planning, contracts and procurement strategies, project scheduling and resource utilization, site layout planning, project cost and quality controls, temporary structures, environmental sustainability, project handover procedures, facility operation and management, IT-based tools for construction project and resource management.

0101	Stephen Wooldridge Th 5:00pm - 7:30pm	Seats (Total: 50) EGR 1108

ENCE340 **Fundamentals of Geotechnical Engineering**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220; and permission of ENGR-Civil & Environmental Engineering department.

Introductory study of soils in civil engineering. Soil origin, phase relationships and classification schemes. Soil hydraulics: capillary, effective stress, permeability and seepage considerations. Basic stress distribution theories and soil consolidation-settlement analysis. Integration of shear strength evaluation with slope stability analysis. If time permits, topics such as applications in geoenvironmental engineering will be covered.

0101	Ahmet Aydilek TuTh 11:00am - 12:15pm	Seats (Total: 55) EGR 0108

ENCE353 **Introduction to Structural Analysis**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department; and (MATH246 and ENES220).

The basic tools of structural analysis and design. Design loads. Equilibrium of external and internal forces. Shear and moment diagrams in beams and frames. Truss analysis. Influence line diagrams. The slope-deflection method and method of consistent deformation. Matrix stiffness methods for beams, frames and trusses.

0101	Bilal Ayyub MWF 9:00am - 9:50am	Seats (Total: 62) EGR 0108

ENCE360 **Analysis of Civil Engineering Systems**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE201 and MATH140; and permission of ENGR-Civil & Environmental Engineering department.

Introduction to systems approach and systems analysis in civil and environmental engineering. Introduction to systems analysis tools that facilitate engineering management decision making including optimization and computer simulation. Introduction to linear and nonlinear mathematical optimization including linear and integer programming, elementary nonlinear programming and dynamic programming.

0101	Ali Haghani TuTh 9:30am - 10:45am	Seats (Total: 36) EGR 1156
0201	Ali Haghani TuTh 11:00am - 12:15pm *Meets in CEE Design Lab.*	Seats (Total: 36) EGR 1156

ENCE370 **Introduction to Transportation Engineering and Planning**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE201, PHYS260, and PHYS261; and permission of ENGR-Civil & Environmental Engineering department.

Engineering problems of transportation by highways, airways, pipelines, waterways, and railways. Transportation modes and technologies, vehicle dynamics, basic facility design, traffic stream models, capacity analysis, transportation planning, evaluation and choice, and network analysis.

0101	Cinzia Cirillo MWF 1:00pm - 1:50pm	Seats (Total: 48) PHY 1402

ENCE402 **Simulation and Design of Experiments for Engineers**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE302; and permission of ENGR-Civil & Environmental Engineering department.

Review of statistics and hypothesis testing, sample design and design o experiments, generation of discrete and continuous distributions and their applications. Introduction of simulation languages and simulation of discrete and continuous engineering systems. Output analysis, model validation and sensitivity and reliability analysis.

0101	David Lovell TuTh 11:00am - 12:15pm	Seats (Total: 40) EGR 1104

ENCE411 **Environmental Engineering Science**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE310; and permission of ENGR-Civil & Environmental Engineering department.

Introduces the analytical techniques available to assess performance of engineering processes as they relate to water, soil, and air treatment and quality. The basic principles of environmental management, economics of waste treatment, by-product reutilization, and energy cycles are introduced and discussed. Alternative technologies are introduced and evaluated mostly by assessing their potential to reduce waste, minimize energy use, and promote sustainability. Students' activities include, a weekly lab to provide hands-on experience with environmental quality measurements and treatment techniques; on-site visits to regional industries that undertake sustainable practices; and a final research project where experimental design and laboratory techniques are used to assess interactions between technologies and natural systems and their potential for reducing environmental impacts.

0101	Natasha Almeida e Andrade TuTh 11:00am - 11:50am W 10:00am - 1:00pm	Seats (Total: 9) EGR 1110 EGR 0136	 Lab
0102	Natasha Almeida e Andrade TuTh 11:00am - 11:50am W 2:00pm - 5:00pm	Seats (Total: 9) EGR 1110 EGR 0136	 Lab

ENCE412 **Environmental Engineering Unit Operations**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE305 and ENCE310; and permission of ENGR-Civil & Environmental Engineering department.

Examination of unit operations and processes encountered in environmental engineering field. Fundamental principles learned from previous classes will be applied into the design and operation of unit operations and processes, particularly in the area of water and wastewater treatment. Similar processes will be applied to air pollution control, solid waste disposal and hazardous waste treatment.

0101	Allen Davis TuTh 2:00pm - 3:15pm	Seats (Total: 43) EGR 3106	

ENCE421 **Legal Aspects of Architectural and Engineering Practice**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management minor; or must be in the Project Management Minor. And permission of ENGR-Civil & Environmental Engineering department.

Learn the basic structure of the US legal system and court procedures and legal principles relevant to architectural and engineering design and construction contracts including principles of ethical, legal and professional conduct of engineers and architects.Topics include: contracts for design and construction, sales and warranties, torts and product liability, business agency and government agencies, professional liability of architects and engineers, labor laws, expert testimony, mediation and arbitration, tangible property including real estate, intellectual property including trademarks, patents and copyrights, insurance and sureties.

0101	Miroslaw Skibniewski M 5:00pm - 7:30pm	Seats (Total: 60) CHE 2108

ENCE422 **Project Cost Accounting and Economics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management Minor; or must be in the Project Management Minor.

Learn: the fundamentals of accounting; project cost accounting principles as they apply to project management; project cost accounting; and the fundamentals of engineering economics.Topics include: project feasibility analysis; reading and analyzing financial statements; cash management; cash flow analysis; depreciation and taxes; and impact on profitability; the principles of activity based costing; net present value analysis; the framework for project performance measurement, cost performance indices, and earned value analysis.

A Partnership for Action Learning in Sustainability (PALS) course where students apply classroom learning to actual community needs.

0101	Qingbin Cui W 5:00pm - 7:30pm	Seats (Total: 75) JMP 3201

ENCE423 **Project Planning, Estimating & Scheduling**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management Minor; or must be in the Project Management Minor. And permission of ENGR-Civil & Environmental Engineering department.

Learn the fundamentals of project planning, estimating, and scheduling. Understand the concepts of planning; to reduce uncertainty, improve efficiency of the operation, to set and meet objectives, and to provide a basis for monitoring and controlling the work. Be introduced to: the concepts of resource definition, assignment and management, and; the basics of project estimating (pricing) methods including global pricing strategies, types of estimates, pricing processes, overhead and profit, and project financing.Learn the basics of project scheduling including; bar charts, network-based methodologies, and linear scheduling techniques. Emphasis is placed on Critical Path Method (CPM) scheduling, a network based methodology. Be exposed to the use of scheduling software and will actually develop a CPM schedule for an actual construction project as part of a semester project.

0101	Kenneth O'Connell M 5:00pm - 7:30pm	Seats (Total: 75) KEB 1110

ENCE424 **Communication for Project Managers**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management Minor; or must be in the Project Management Minor.

Learn the fundamentals of communications for project managers. Emphasis is on interpersonal and group communications; through voice, electronic, and written messages; project cycle and reports and presentations during this cycle; and communications for employment.

0101	Shana Webster-Trotman Tu 5:00pm - 7:30pm	Seats (Total: 77) ATL 2400

ENCE426 **Construction Documentation and BIM Applications in Engineering and Construction**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management Minor; or must be in the Project Management Minor.

Learn the basics of construction documentation methods, with particular emphasis on Building Information Modeling (BIM). Topics include: the fundamentals of assembly, coordination, and maintenance of construction documents and implementation of BIM techniques in the design and construction processes, and; a review of Autodesk, Revit, and Navisworks and other leading BIM software. Lectures from project management faculty supplemented by guest lecturers from the construction industry.

0101	Jason Dreher W 6:00pm - 8:30pm	Seats (Total: 41) EGR 0108

ENCE431 **Hydrologic Engineering**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE305; and permission of ENGR-Civil & Environmental Engineering department.

An introduction to basic principles of hydrologic science including the hydrologic cycle, rainfall, surface runoff and streamflow. Special emphasis is placed on hydrologic engineering design of stormwater management and flood control facilities. Design projects are used to illustrate design practices.

0101	Richard McCuen MWF 9:00am - 9:50am	Seats (Total: 43) EGR 1104	

ENCE444 **Experimental Methods in Geotechnical Structural Engineering**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE353 and ENCE340; and permission of ENGR-Civil & Environmental Engineering department.

In the geotechnical engineering part of the course, major soils testing and their interpretation including classification, compaction, strength, and compressibility will be undertaken. The structural engineering part of this course covers test planning, loading apparatus, instrumentation, data acquisition and data analysis, as well as basic aspects of structural testing techniques and shake-table test.

0101	Mohamed Aggour, Yunfeng Zhang Tu 2:00pm - 2:50pm W 1:00pm - 4:00pm	Seats (Total: 20) EGR 0135 EGR 3114	 Lab
0102	Mohamed Aggour, Yunfeng Zhang Tu 2:00pm - 2:50pm W 1:00pm - 4:00pm	Seats (Total: 20) AJC 2119 EGR 1110	 Lab

ENCE447 **Pavement Engineering**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE340; and permission of ENGR-Civil & Environmental Engineering department.

Fundamental principles underlying the design, construction, maintenance and repair, and management of highway and airfield pavement systems. Pavement performance (functional/structural; evaluation); pavement mechanics (multi-layered elastic theory; slab theory); pavement materials (properties and characterization); environmental effects; current rigid and flexible design methods (new/rehabilitation); construction (new construction; maintenance/repair; rehabilitation); economic evaluation; pavement management.

0101	Charles Schwartz	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	EGR 3102

ENCE453 **Computer-Aided Structural Analysis**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE353; and permission of ENGR-Civil & Environmental Engineering department.

Computer-aided analysis of structural systems. Unified matrix formulation of stiffness and flexibility methods. Slope deflection method. Evaluation of truss, frame, and grid systems. Non-prismatic and curved elements. Error analysis and determination of ill-conditions. Introduction to finite element methods; formulation of simple two-dimensional elements. In laboratory, use and development of CAD software.

0101	Amde Amde	Seats (Total: 32)
	TuTh 9:30am - 10:45am	EGR 2154

ENCE455 **Design of Steel Structures**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE353; and permission of ENGR-Civil & Environmental Engineering department.

Behavior and design of members subjected to fatigue, and combined bending and compression; plate girders, composite beams, open-web joists and connections. Methods of allowable stress design, and load and resistance factor design. Elements of plastic analysis and design. Framing systems and loads for industrial buildings and bridges.

0101	Brian Phillips	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	CHM 1224

ENCE466 **Design of Civil Engineering Systems**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Senior standing. Additional information: Must be taken in the semester in which the student graduates.

A major civil engineering design experience that emphasizes development of student creativity, development and use of design methodologies, evaluation of alternate solutions, feasibility considerations, and detailed system descriptions. Realistic design constraints including economic factors, safety, aesthetics, and reliability will be imposed. Students will work in design project groups and be required to exercise oral and written communication skills.

0101	Russell Anderson Tu 3:30pm - 4:45pm Th 3:30pm - 4:45pm	Seats (Total: 40) EGR 1202 EGR 1156	 Discussion
0102	Russell Anderson Tu 3:30pm - 4:45pm Th 2:00pm - 3:15pm	Seats (Total: 40) EGR 1202 EGR 1156	 Discussion

ENCE472 **Transportation Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENCE302 and ENCE370; and permission of ENGR-Civil & Environmental Engineering department.

Transportation engineering concepts including transportation systems analysis, airport systems, airline and airport operations, marine transportation and urban public transportation systems.

A Partnership for Action Learning in Sustainability (PALS) course where students apply classroom learning to actual community needs.

0101	Paul Schonfeld TuTh 12:30pm - 1:45pm	Seats (Total: 35) JMP 1109

ENCE489 **Special Problems in Civil Engineering**

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

A course arranged to meet the needs of exceptionally well prepared students for study in a particular field of civil engineering.

Contact department for information to register for this course.

ENCE489G **Special Problems in Civil Engineering; Sustainability and Infrastructure**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

A course arranged to meet the needs of exceptionally well prepared students for study in a particular field of civil engineering.

Contact department for information to register for this course.

ENCE602 **Project Procurement Management**

Credits: 3

Grading Method: Regular, Audit

Fundamental concepts and techniques for project acquisition and procurement are presented. Students are introduced to the PMBOK Guide six-step procurement process and expected to develop an in-depth understanding of project evaluation, planning, financing, contracting, negotiation, and procurement execution. It will also cover emerging methods, principles, and practices in infrastructure project procurement, including Public-Private Partnerships, Carbon project procurement, and Clean Development Mechanism.

Weekly video conference Tuesday 8:00pm to 9:00pm.

PM01	Qingbin Cui Class time/details on ELMs *Weekly video conferences Wednesdays 8:00-9:00pm.*	Seats (Total: 25) ONLINE

ENCE604 **Sustainabilty Fundamentals for Project Managers**

Credits: 3

Grading Method: Regular, Audit

Addresses the fundamentals of sustainability for project managers including best practices of modern sustainable construction and project management. Commercial and residential buildings consume about 40 percent of the energy used in the United States. Therefore, emphasis will be on the application of the sustainable development standards to the built environment, including the practical operational aspects of sustainable facility project management.

0101	Neil Schulman M 1:00pm - 3:40pm	Seats (Total: 29) JMP 2217
PM01	Neil Schulman Class time/details on ELMs *Weekly videoconferences Wednesdays 7:00-8:00pm.*	Seats (Total: 30) ONLINE
SG01	Neil Schulman Contact instructor or department for details.	Seats (Total: 20)

SM01	Neil Schulman	Seats (Total: 20)
	Contact instructor or department for details.	

ENCE607 **Mastering Agile Project Management**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed or be concurrently enrolled in ENCE662. Restriction: Must be in one of the following programs: MS in Civil Engineering, Master of Engineering in Project Management, or Post-Baccalaureate Certificate in Engineering in Project Management; or must have permission of the department.

Learn how and why Agile project management is the fastest growing and most successful project management philosophy today. Learn the mechanics of how to design and facilitate projects using pure Agile Scrum and Lean Kanban techniques; The tradeoffs of using hybrid techniques such as Lean Startup, Scaled Agile for the Enterprise, and Disciplined Agile Development. Then go beyond these frameworks to the science beneath with the essential principles to ensure you get the best benefits of Agile project management methods.

0101	John Johnson	Seats (Total: 25)
	Th 4:00pm - 6:40pm	EGR 1110

ENCE621 **Uncertainty Modeling and Analysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENCE302; or students who have taken courses with comparable content may contact the department.

Definition of engineering systems, knowledge levels using information science concepts as applied to engineering systems, sources and types of knowledge and ignorance, uncertainty sources and types for engineering systems, probability models, statistical models, fuzziness, fuzzy sets, fuzzy logic, fuzzy arithmetic, imprecise probabilities, evidence methods, uncertainty measures, uncertainty management, uncertainty reduction, applications of these analytical methods to engineering systems and in decision making.

Also offered as ENCE621. Credit only granted for ENCE621 or ENRE648D.

0101	Bilal Ayyub	Seats (Total: 15)
	MW 2:00pm - 3:15pm	EGR 0135

ENCE622 **Construction Automation & Robotics**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Engineering: Civil program; or permission of ENGR-Civil & Environmental Engineering department.

Covers advanced technologies leading to redesign and partial or full automation of selected construction processes utilizing industrial robotics. Lectures and presentations will cover topics such as basic robotic technology (robot kinematics and dynamics, industrial manipulators, mobility bases, end effectors, sensors, control systems, and robot task programming), design of automated construction processes, selection of means and methods for automated construction processes, robot ergonomics and safety, calculation of costs and benefits of construction robots in selected applications, engineering and economic feasibility of automation and robotics in the construction industry.

Also offered as ARCH688C. Credit only granted for ENCE622 or ARCH688C.

0101	Miroslaw Skibniewski Tu 4:00pm - 6:40pm	Seats (Total: 25) JMP 2217

ENCE627 Project Risk Management

Credits: 3 Grading Method: Regular

Restriction: Must not have completed ENCE627.

Introduction to identifying, analyzing, assessing, and managing risks inherent to engineering projects. Includes: probability modeling, choice and value theory, schedule and cost risk, risk mitigation and transfer, and contract considerations of project risk. Examples are drawn from construction, software development, systems integration, and other large engineering projects; and cover probability basics, subjective probability, statistical data analysis, introduction to decision theory, Monte Carlo simulation, value of information, and risk-based decision making.

0101	Gregory Baecher F 8:00am - 10:40am	Seats (Total: 30) JMP 2217

ENCE647 Slope Stability and Seepage

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENCE340. Credit only granted for: ENCE489A, ENCE647, or ENCE688A. Formerly: ENCE688A.

Theoretical and practical aspects of seepage effects, and groundwater flow, review of shear strength principles, flow through porous media, hydraulic conductivity, flow nets, determination of water pressure, seepage forces and quantity of seepage, laboratory and field tests for shear strength, infinite slopes, block analysis, method of slices, seismic analysis of slopes, effective and total stress analysis, computer program for slope stability analysis, slope stability problems in waste disposal, construction excavations, reinforced embankments, embankments on soft ground.

0101	Ahmet Aydilek	Seats (Total: 15)
	Tu 5:00pm - 7:30pm	EGR 3106

ENCE655 Environmental Behavior of Organic Pollutants

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENCE651.

Introduction to the scientific data needed and methods currently available to assess the environmental risk of organic chemicals. Applications of principles from chemical thermodynamics will be used to study phase-transfer processes of organic pollutants in the environment (solid/water, solid/air, water/air). Physical-chemical properties of organic pollutants will be used to estimate partitioning.

0101	Alba Torrents	Seats (Total: 15)
	Th 1:00pm - 3:30pm	EGR 3111

ENCE660 Principles of Disaster Management

Credits: 3 Grading Method: Regular, Audit

Covers the complexities and unique requirements that arise in preparing for, responding to, recovering from and mitigating against natural disasters. It focuses on what the Manager should know to handle pre- and post-disaster projects. The course introduces underlying policies, programs and emergency management protocols related to managing natural disasters. It translates the lexicons of emergency management to align with project management tools and processes. The course also explores the challenges of executing and delivering projects and programs during each phase of the emergency management cycle. The student will learn to build disaster-resilient concepts and emergency management into project management processes and be better equipped to contribute to a more sustainable and disaster-resilience future.

0101	Sandra Knight	Seats (Total: 25)
	M 4:00pm - 6:40pm	EGR 3102

ENCE662 Introduction to Project Management

Credits: 3 Grading Method: Regular, Audit

Introduction to project management including: overview and concepts of project management (principles, body of knowledge, strategies); planning successful projects (defining, specifying, delivery options, scheduling, budgeting); implementing (organizing the team, work assignments, team building, effective leadership); executing (performance measurement, maintaining the schedule, adjustments/mid-course corrections, record keeping, status reporting, communications, managing conflict, time management); and closeout(performance measurement, maintaining the schedule, adjustments/mid-course corrections, record keeping, status reporting, communications, managing conflict, time management).

PM01	John Johnson	Seats (Total: 35)
	Meets January 21, 2019 - May 14, 2019	
	Class time/details on ELMs	ONLINE
	Weekly video conferences Th 7:00-8:00am or 8:00-9:00pm	

ENCE664 **Legal Aspects of Engineering Design and Construction**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department.

Examines ways in which the legal system affects the design and construction process. Focuses on contract types and the relationships between the parties in different delivery systems. Covers basics of procurement protocols along with negotiating techniques and strategies. Topics include contract law, the relationships between the parties, tort and negligence law, and the statutory principles affecting construction.

0101	Mark Groff, Thomas Powell, Thomas Barham	Seats (Total: 50)
	W 4:00pm - 6:40pm	JMP 2121
SG01	Thomas Powell, Thomas Barham, Mark Groff	Seats (Total: 20)
	Contact instructor or department for details.	
SM01	Thomas Barham, Thomas Powell, Mark Groff	Seats (Total: 20)
	Contact instructor or department for details.	

ENCE665 **Management of Project Teams**

Credits: 3 Grading Method: Regular, Audit

Experience has shown that really excellent project managers are not only technically competent but that they have above average skills in human relations and communications. The course will prepare project managers to optimize the utilization of their most important resource: people. Relying primarily on a wide range of research and experience in the Project Team, this course will help guide project managers in building the other skills needed to be truly successful in the competitive Project Team.

PM01	Jocelyn Davis	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
	Weekly video conferences: Monday 5:00pm.	
PM02	Jocelyn Davis	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
	Weekly video conferences: Monday 6:00pm to 7:00pm.	

ENCE673 **Urban Transportation**

Credits: 3 Grading Method: Regular, Audit

The contempory methodology of urban transportation planning. The urban transportation planning process, interdependence between the urban transportation system and the activity system, urban travel demand models, evaluation of urban transportation alternatives and their implementation.

0101	Lei Zhang	Seats (Total: 25)
	W 2:00pm - 4:30pm	MTH 0407

ENCE676 **Highway Traffic Flow Theory**

Credits: 3 Grading Method: Regular, Audit

An examination of physical and statistical laws that are used to represent traffic flow phenomena. Deterministic models including heat flow, fluid flow, and energy-momentum analogies, car following models, and acceleration noise. Stochastic approaches using independent and Markov processes, Queuing models, and probability distributions.

0101	Gang-Len Chang	Seats (Total: 20)
	Th 5:00pm - 7:30pm	EGR 1104

ENCE681 **Freight Transportation Analysis**

Credits: 3 Grading Method: Regular, Audit

Application of operations research and system analysis methods to freight transportation systems. Cost and output analysis, terminal location, freight transportation demand models, freight transportation network equilibrium models and analytic models for analyzing the operations of rail, motor carrier, water carrier and air cargo systems.

0101	Paul Schonfeld	Seats (Total: 18)
	Tu 5:00pm - 7:45pm	EGR 2116

ENCE688G **Advanced Topics in Civil Engineering; Computational Methods for Transportation Demand Analysis**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the current literature of civil engineering to suit the needs and background of students. May be taken for repeated credit when identified by topic title.

0101	Cinzia Cirillo	Seats (Total: 20)
	W 4:45pm - 7:15pm	EGR 1110

ENCE688K **Advanced Topics in Civil Engineering; Flow in Open Channels and Conveyance Structures**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the current literature of civil engineering to suit the needs and background of students. May be taken for repeated credit when identified by topic title.

0101	Kaye Brubaker	Seats (Total: 15)
	MW 2:00pm - 3:15pm	AJC 2119

ENCE688R **Advanced Topics in Civil Engineering; Civil Information Systems**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the current literature of civil engineering to suit the needs and background of students. May be taken for repeated credit when identified by topic title.

0101	Mark Austin	Seats (Total: 25)
	TuTh 5:00pm - 6:15pm	EGR 3114

ENCE688Y **Advanced Topics in Civil Engineering; Research Methods Seminar**

Credits: 1 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the current literature of civil engineering to suit the needs and background of students. May be taken for repeated credit when identified by topic title.

Intended for PhD and MSc students enrolled in the Project Management Program. It is strongly recommended for PhD candidates to develop their re-search topic and build strong research capability. The course provides a sound under-standing of the enterprise of engineering research, from selecting a thesis topic, to the development of a research proposal, to planning and executing a research plan, to writ-ing a dissertation and publishable articles. Students will review published research re -ports, conduct a literature survey, and write a preliminaryresearch proposal. Students will carry out assignments involving design of small experiments, and learn how to statistically analyze data and report results. The course comprises lectures from PM faculty and guest lecturers.

0101	Qingbin Cui, Gregory Baecher	Seats (Total: 25)
	F 10:00am - 10:50am	EGR 1102

ENCE689 **Seminar**

Credits: 1-16 Grading Method: Regular, Audit

Majors only. Other majors require permission of department.

Contact department for information to register for this course.

ENCE710 **Steel Structures I**

Credits: 3 Grading Method: Regular, Audit

Formerly: ENCE656.

Moment connections of beams and columns. Wind bracing connections. Plat girders. Floor systems for buildings. Strengthening of beams and trusses. Corrosion control. Fatigue and fracture.

0101	Brian Phillips	Seats (Total: 30)
	Tu 5:00pm - 7:35pm	EGR 1108

ENCE713 **Concrete Structures I**

Credits: 3 Grading Method: Regular, Audit

Formerly: ENCE753.

The behavior and strength of reinforced concrete members under combined loadings, including the effects of creep, shrinkage and temperature. Mechanisms of shear resistance and design procedures for bond, shear and diagonal tension. Elastic and ultimate strength analysis and design of slabs. Columns in multistory frames. Applications to reinforced concrete structures.

0101	Amde Amde	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	EGR 2154

ENCE715 **Earthquake Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of instructor. Formerly: ENCE755.

Review of SDOF and MDOF structural dynamics; characteristics of earthquakes; philosophies of seismic design; elastic and inelastic response spectra; design for ductility; principles of capacity design; design of structural systems requiring special performance criteria.

0101	Yunfeng Zhang	Seats (Total: 20)
	W 5:00pm - 7:30pm	EGR 3114

ENCE730 **Environmental and Water Resource Systems II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENCE630; or permission of instructor.

Advanced topics in operational research. Applications to complex environmental and water resource systems. The use of systems simulation and probabalistic modeling.

0101	Richard McCuen	Seats (Total: 10)
	TuTh 9:30am - 10:45am	EGR 1104

ENCE743 **Soil Dynamics and Earthquake Engineering**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENCE642 or ENCE743. Formerly: ENCE642.

Review of theory of vibration and wave propagation in elastic media. Field and laboratory methods for determining dynamic soil properties. Analysis and design of soil-foundation systems subjected to machinery generated vibrations and methods of foundation isolation. Earthquake causes, magnitude and intensity, seismic hazard evaluation, NEHRP site classification, site response analyses and ground motion amplification, liquefaction and response of earth structures.

0101	Mohamed Aggour	Seats (Total: 25)
	Th 5:00pm - 7:30pm	EGR 2116

ENCE799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Majors only. Other majors require permission of department.

Contact department for information to register for this course.

ENCE898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENCE899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Majors only. Other majors require permission of department.

Contact department for information to register for this course.

ENCH Engineering, Chemical Spring 2019

ENCH609 **Graduate Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Advanced special students require department permission.

0101	Taylor Woehl	Seats (Total: 30)
	Tu 11:00am - 12:00pm	CHE 2110

ENCH630 **Transport Phenomena**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CHBE422; and ENCH424. Or students who have taken courses with comparable content may contact the department. Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department.

Heat, mass and momentum transfer theory from the viewpoint of the basic transport equations. Steady and unsteady state; laminar and turbulent flow; boundary layer theory, mechanics of turbulent transport; with specific application to complex chemical engineering situations.

0101	Panagiotis Dimitrakopoulos	Seats (Total: 30)
	MW 3:30pm - 4:45pm	EGR 2116

ENCH640 **Advanced Chemical Reaction Kinetics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CHBE440; or students who have taken courses with comparable content may contact the department. Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department.

The theory and application of chemical reaction kinetics to reactor design. Reaction rate theory; homogeneous batch and flow reactors; fundamentals of catalysis; design of heterogeneous flow reactors.

0101	Dongxia Liu MW 2:00pm - 3:15pm	Seats (Total: 30) EGR 2116

ENCH648 **Special Problems in Chemical Engineering**

(Perm req)

Credits: 1-16 Grading Method: Regular, Audit

Contact department for information to register for this course.

ENCH648C **Special Problems in Chemical Engineering; Control of Air Pollution Sources**

(Perm req)

Credits: 1-16 Grading Method: Regular, Audit

0101	Akua Asa-Awuku TuTh 12:30pm - 1:45pm	Seats (Total: 15) ESJ 2309

ENCH648D **Special Problems in Chemical Engineering; Biopharmaceutical Process Development and Manufacturing**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

0101	Deborah Goldberg MW 12:30pm - 1:45pm	Seats (Total: 5) AJC 2119

ENCH648K **Special Problems in Chemical Engineering; Advanced Fuel Cells and Batteries**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

0101	Paul Albertus MW 11:00am - 12:15pm	Seats (Total: 20) JMP 2222

ME01	Paul Albertus	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

ENCH648N **Special Problems in Chemical Engineering; Bionanotechnology**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Also offered as BIOE689N. Credit granted for ENCH648N or BIOE689N.

0101	Srinivasa Raghavan	Seats (Total: 33)
	TuTh 3:30pm - 4:45pm	CHE 2110

ENCH648Q **Special Problems in Chemical Engineering; Mesoscopic and Nanoscale Thermodynamics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

0101	Mikhail Anisimov	Seats (Total: 10)
	TuTh 12:30pm - 1:45pm	EGR 1104

ENCH781 **Polymer Reaction Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENCH640; or permission of instructor.

Advanced topics in polymerization kinetics, reactor design and analysis; addition and step-growth polymerization; homogeneous and heterogeneous polymerization; photopolymerization; reactor dynamics; optimal operation and control of industrial polymerization reactors.

0101	Kyu Yong Choi	Seats (Total: 4)
	TuTh 9:30am - 10:45am	CHE 2145

ENCH799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ENCH898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENCH899 **Doctoral Dissertation Research; Chemical Engineering**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ENCO Engineering, Cooperative Education Spring 2019

ENCO099 **Co-Op/Intern Work Experience; Co-op/Intern Work Experience**

(Perm req)

Credits: 0 Grading Method: Sat-Fail

Participation in a cooperative education (co-op) or internship program enables students to apply the theories that they have learned in their traditional classes with paid, supervised, career-related work experience that develops technical and professional work skills. Contact the Engineering Co-op & Career Services Office.

Permission of Co-op Director required. Obtain permission and more information in 1131 College of Engineering. For special fees, see the Financial Information section of the Registration Guide.

0101	Heidi Sauber, Veronica Perrigan	Seats (Total: 200)
	Contact instructor or department for details.	

ENEE Electrical & Computer Engineering Spring 2019

ENEE101 **Introduction to Electrical & Computer Engineering**

(Perm req)

Credits: 3 Grading Method: Regular

Corequisite: MATH140. And corequisite: ENEE140 or CMSC131; or a score of 5 on the A Java AP exam; or a score of 4 or 5 on the AB Java AP exam; or satisfactory performance on the department's placement exam. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer) ; and students cannot enroll in ENEE101 and ENES100 in the same semester.

An exploration of topics within Electrical & Computer Engineering (ECE). Students will be introduced to key elements of both the Electrical Engineering and Computer Engineering curriculum, including: circuits, computing systems and software, communications and controls, electrodynamics and waves, microelectronics, signal processing, and power systems.

0101	Joseph JaJa	Seats (Total: 12)	
	F 12:30pm - 1:45pm	ATL 2324	
	MW 8:00am - 9:50am	AVW 1344	Lab

0102	Joseph JaJa F 12:30pm - 1:45pm MW 10:00am - 11:50am	Seats (Total: 12) ATL 2324 AVW 1344	Lab
0103	Joseph JaJa F 12:30pm - 1:45pm MW 12:00pm - 1:50pm	Seats (Total: 12) ATL 2324 AVW 1344	Lab
0104	Joseph JaJa F 12:30pm - 1:45pm MW 2:00pm - 3:50pm	Seats (Total: 12) ATL 2324 AVW 1344	Lab
0105	Joseph JaJa F 12:30pm - 1:45pm TuTh 8:00am - 9:50am	Seats (Total: 12) ATL 2324 AVW 1344	Lab
0106	Joseph JaJa F 12:30pm - 1:45pm TuTh 10:00am - 11:50am	Seats (Total: 12) ATL 2324 AVW 1344	Lab
0107	Joseph JaJa F 12:30pm - 1:45pm TuTh 12:00pm - 1:50pm	Seats (Total: 12) ATL 2324 AVW 1344	Lab
0108	Joseph JaJa F 12:30pm - 1:45pm TuTh 2:00pm - 3:50pm	Seats (Total: 12) ATL 2324 AVW 1344	Lab
0109	Joseph JaJa F 12:30pm - 1:45pm MW 4:00pm - 5:50pm	Seats (Total: 12) ATL 2324 AVW 1344	Lab
0110	Joseph JaJa F 12:30pm - 1:45pm TuTh 4:00pm - 5:50pm	Seats (Total: 12) ATL 2324 AVW 1344	Lab

ENEE140 **Introduction to Programming Concepts for Engineers**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in Engineering: Electrical program; or must be in Engineering: Materials Science program.

Introduction to the programming environment: editing, compiling, UNIX, data types and variable scope; program selection, formatted/unformatted input/output, repetition, functions, arrays and strings.

0101	Tudor Dumitras Tu 3:30pm - 4:45pm WF 8:00am - 8:50am	Seats (Total: 14) ATL 2324 AVW 1442	Discussion
0102	Tudor Dumitras Tu 3:30pm - 4:45pm WF 9:00am - 9:50am	Seats (Total: 14) ATL 2324 AVW 1442	Discussion
0103	Tudor Dumitras Tu 3:30pm - 4:45pm WF 10:00am - 10:50am	Seats (Total: 14) ATL 2324 AVW 1442	Discussion
0104	Tudor Dumitras Tu 3:30pm - 4:45pm WF 11:00am - 11:50am	Seats (Total: 14) ATL 2324 AVW 1442	Discussion

ENEE150 **Intermediate Programming Concepts for Engineers**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Permission of ENGR-Electrical & Computer Engineering department. And ENEE140 or CMSC131; or score of 5 on the A Java AP exam; or score of 4 or 5 on the AB Java AP exam; or satisfactory performance on the department's placement exam. Corequisite: MATH140. Restriction: Must be in Engineering: Electrical program. Credit only granted for: ENEE114 or ENEE150. Formerly: ENEE114.

Advanced programming concepts: coding conventions and style; pointers; dynamic memory allocation and data structures; linked lists; graphs; abstract data types; object-oriented design. There will be team-based software projects and group presentations.

0101	Donald Yeung MW 11:00am - 12:15pm Th 9:00am - 9:50am	Seats (Total: 12) EGR 0135 AVW 1442	Discussion
0102	Donald Yeung MW 11:00am - 12:15pm Th 10:00am - 10:50am	Seats (Total: 12) EGR 0135 AVW 1442	Discussion

0103	Donald Yeung MW 11:00am - 12:15pm Th 11:00am - 11:50am	Seats (Total: 12) EGR 0135 AVW 1442	Discussion
0201	William Hawkins TuTh 11:00am - 12:15pm F 11:00am - 11:50am	Seats (Total: 12) EGR 0135 AVW 2446	Discussion
0202	William Hawkins TuTh 11:00am - 12:15pm F 2:00pm - 2:50pm	Seats (Total: 12) EGR 0135 AVW 1442	Discussion
0203	William Hawkins TuTh 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 12) EGR 0135 AVW 2446	Discussion

ENEE200 **Technology and Consequences: Engineering, Ethics, and Humanity**

Credits: 3 Grading Method: Regular CORE: IE General Education: DSHU, SCIS

What makes a technology socially responsible? At UMD, the Fearless Ideas campaign asks us to aim our enthusiasm for technology at big real problems. At the same time, we are coming to appreciate the increasingly complex nature of technological systems as they become integrated into all forms of infrastructure, we realize they may be unpredictable, interdependent on social and biological systems, and have unintended consequences. In this midst of this complexity, people make decisions with far reaching impacts. How then do we follow our passion for technology and innovation but also stay skeptical in a way that allows us to consider the potential and shortcomings of technology? Designed for both engineering and non-engineering students wishing to explore and assess the impact of engineering technology on society and the role of society in generating that technology.

0101	Nicole Mogul Tu 11:00am - 12:15pm Th 11:00am - 11:50am F 8:00am - 9:15am	Seats (Total: 16) TWS 0310 TWS 0310 CHM 0119	Discussion
0102	Nicole Mogul Tu 11:00am - 12:15pm Th 11:00am - 11:50am F 10:00am - 11:15am	Seats (Total: 16) TWS 0310 TWS 0310 CHM 1228	Discussion

0103	Nicole Mogul	Seats (Total: 16)	
	Tu 11:00am - 12:15pm Th 11:00am - 11:50am F 10:00am - 11:15am	TWS 0310 TWS 0310 CHM 0127	 Discussion
0104	Nicole Mogul	Seats (Total: 16)	
	Tu 11:00am - 12:15pm Th 11:00am - 11:50am F 12:00pm - 1:15pm	TWS 0310 TWS 0310 CHM 0119	 Discussion
0105	Nicole Mogul	Seats (Total: 16)	
	Tu 11:00am - 12:15pm Th 11:00am - 11:50am F 2:00pm - 3:15pm	TWS 0310 TWS 0310 CHM 0119	 Discussion
0106	Nicole Mogul	Seats (Total: 16)	
	Tu 11:00am - 12:15pm Th 11:00am - 11:50am F 11:00am - 12:15pm	TWS 0310 TWS 0310 CHM 0128	 Discussion

ENEE205 **Electric Circuits**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in PHYS260; and minimum grade of C- in PHYS261; and permission of ENGR-Electrical & Computer Engineering department. Corequisite: MATH246. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical). Credit only granted for: ENEE204 or ENEE205. Formerly: ENEE204.

Design, analysis, simulation, construction and evaluation of electric circuits. Terminal Relationships. Kirchoff's laws. DC and AC steady state analysis. Node and mesh methods. Thevenin and Norton equivalent circuits. Transient behavior of first- and second-order circuits. Frequency response and transfer functions. Ideal op-amp circuits. Diode and transistor circuits.

0101	Wesley Lawson	Seats (Total: 12)	
	MW 12:30pm - 1:45pm Tu 12:00pm - 1:50pm Tu 11:00am - 11:50am	KEB 1110 AVW 1356 AVW 1356	 Lab Discussion
0102	Wesley Lawson	Seats (Total: 12)	
	MW 12:30pm - 1:45pm Tu 3:00pm - 4:50pm Tu 2:00pm - 2:50pm	KEB 1110 AVW 1356 AVW 1356	 Lab Discussion

0103	Wesley Lawson	Seats (Total: 12)	
	MW 12:30pm - 1:45pm	KEB 1110	
	Th 12:00pm - 1:50pm	AVW 1356	Lab
	Th 11:00am - 11:50am	AVW 1356	Discussion
0104	Wesley Lawson	Seats (Total: 12)	
	MW 12:30pm - 1:45pm	KEB 1110	
	Th 3:00pm - 4:50pm	AVW 1356	Lab
	Th 2:00pm - 2:50pm	AVW 1356	Discussion
0105	Wesley Lawson	Seats (Total: 12)	
	MW 12:30pm - 1:45pm	KEB 1110	
	Tu 9:00am - 10:50am	AVW 1356	Lab
	Tu 8:00am - 8:50am	AVW 1356	Discussion
0106	Wesley Lawson	Seats (Total: 12)	
	MW 12:30pm - 1:45pm	KEB 1110	
	F 9:00am - 10:50am	AVW 1356	Lab
	F 8:00am - 8:50am	AVW 1356	Discussion
0201	Thomas Murphy	Seats (Total: 12)	
	TuTh 11:00am - 12:15pm	CHE 2108	
	M 12:00pm - 1:50pm	AVW 1356	Lab
	M 11:00am - 11:50am	AVW 1356	Discussion
0202	Thomas Murphy	Seats (Total: 12)	
	TuTh 11:00am - 12:15pm	CHE 2108	
	M 3:00pm - 4:50pm	AVW 1356	Lab
	M 2:00pm - 2:50pm	AVW 1356	Discussion
0203	Thomas Murphy	Seats (Total: 12)	
	TuTh 11:00am - 12:15pm	CHE 2108	
	W 3:00pm - 4:50pm	AVW 1356	Lab
	W 2:00pm - 2:50pm	AVW 1356	Discussion
0204	Thomas Murphy	Seats (Total: 12)	
	TuTh 11:00am - 12:15pm	CHE 2108	
	F 12:00pm - 1:50pm	AVW 1356	Lab
	F 11:00am - 11:50am	AVW 1356	Discussion

0205	Thomas Murphy	Seats (Total: 12)	
	TuTh 11:00am - 12:15pm W 12:00pm - 1:50pm W 11:00am - 11:50am	CHE 2108 AVW 1356 AVW 1356	 Lab Discussion
0206	Thomas Murphy	Seats (Total: 12)	
	TuTh 11:00am - 12:15pm M 9:00am - 10:50am M 8:00am - 8:50am	CHE 2108 AVW 1356 AVW 1356	 Lab Discussion

ENEE222 **Elements of Discrete Signal Analysis**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH141; and permission of ENGR-Electrical & Computer Engineering department. And minimum grade of C- in ENEE140; or minimum grade of C- in CMSC131. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer). Credit only granted for: ENEE222, ENEE241, or MATH242. Formerly: ENEE241.

Discrete-time and continuous-time signals, sampling. Linear transformers, orthogonal projections. Discrete Fourier Transform and its properties. Fourier Series. Introduction to discrete-time linear filters in both time and frequency domains.

0101	Eyad Abed	Seats (Total: 25)	
	MW 2:00pm - 3:15pm Th 10:00am - 10:50am Tu 10:00am - 10:50am	KEB 1200 KEB 2111 KEB 2111	 Lab Discussion
0102	Eyad Abed	Seats (Total: 25)	
	MW 2:00pm - 3:15pm Th 11:00am - 11:50am Tu 11:00am - 11:50am	KEB 1200 KEB 2111 KEB 2111	 Lab Discussion
0201	Adrianos Papamarcou	Seats (Total: 25)	
	TuTh 12:30pm - 1:45pm W 9:00am - 9:50am F 9:00am - 9:50am	KEB 1110 KEB 2107 KEB 2107	 Lab Discussion
0202	Adrianos Papamarcou	Seats (Total: 25)	
	TuTh 12:30pm - 1:45pm W 10:00am - 10:50am F 10:00am - 10:50am	KEB 1110 KEB 2107 KEB 2107	 Lab Discussion

0203	Adrianos Papamarcou TuTh 12:30pm - 1:45pm W 8:00am - 8:50am F 8:00am - 8:50am	Seats (Total: 25) KEB 1110 KEB 2107 KEB 2107	 Lab Discussion

ENEE244 **Digital Logic Design**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in CMSC132 or ENEE150; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Sophomore standing or higher; and must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

The design and analysis of combinational and synchronous sequential systems comprising digital logic gates and flip-flop memory devices; underlying tools such as switching and Boolean algebras and Karnaugh map simplification of gate networks; design and use of decoders, multiplexers, encoders, adders, registers, counters, sequence recognizers, programmable logic arrays (PLAs), read-only memories (ROMS, PROMS), and similar devices. Arbitrary radix conversion.

0101	Manoj Franklin MW 3:30pm - 4:45pm F 8:00am - 8:50am	Seats (Total: 12) CHE 2108 EGR 1110	 Discussion
0102	Manoj Franklin MW 3:30pm - 4:45pm F 9:00am - 9:50am	Seats (Total: 12) CHE 2108 EGR 1110	 Discussion
0103	Manoj Franklin MW 3:30pm - 4:45pm F 10:00am - 10:50am	Seats (Total: 12) CHE 2108 CHM 0122	 Discussion
0104	Manoj Franklin MW 3:30pm - 4:45pm F 11:00am - 11:50am	Seats (Total: 12) CHE 2108 CHE 2116	 Discussion
0201	Jerry Wu TuTh 2:00pm - 3:15pm M 8:00am - 8:50am	Seats (Total: 12) KEB 1200 EGR 3111	 Discussion
0202	Jerry Wu TuTh 2:00pm - 3:15pm M 9:00am - 9:50am	Seats (Total: 12) KEB 1200 EGR 3102	 Discussion

0203	Jerry Wu TuTh 2:00pm - 3:15pm M 10:00am - 10:50am	Seats (Total: 12) KEB 1200 EGR 3111	 Discussion
0204	Jerry Wu TuTh 2:00pm - 3:15pm M 11:00am - 11:50am	Seats (Total: 12) KEB 1200 EGR 3111	 Discussion

ENEE245 **Digital Circuits and Systems Laboratory**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE244. And minimum grade of C- in ENEE150; or minimum grade of C- in CMSC132. And permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer).

Introduction to basic measurement techniques and electrical laboratory equipment (power supplies, oscilloscopes, voltmeters, etc.). Design, construction, and characterization of digital circuits containing logic gates, sequential elements, oscillators, and digital integrated circuits. Introduction to digital design and simulation with the Verilog Hardware Description Language (HDL).

0101	Manoj Franklin W 10:00am - 10:50am Tu 8:00am - 10:50am	Seats (Total: 12) EGR 1202 AVW 1450	 Lab
0102	Manoj Franklin W 10:00am - 10:50am Tu 11:00am - 1:50pm	Seats (Total: 12) EGR 1202 AVW 1450	 Lab
0103	Manoj Franklin W 10:00am - 10:50am M 2:00pm - 4:50pm	Seats (Total: 12) EGR 1202 AVW 1450	 Lab
0104	Manoj Franklin W 10:00am - 10:50am W 11:00am - 1:50pm	Seats (Total: 12) EGR 1202 AVW 1450	 Lab
0105	Manoj Franklin W 10:00am - 10:50am Th 11:00am - 1:50pm	Seats (Total: 12) EGR 1202 AVW 1450	 Lab

0106	Manoj Franklin W 10:00am - 10:50am M 8:00am - 10:50am	Seats (Total: 12) EGR 1202 AVW 1450	Lab
0107	Manoj Franklin W 10:00am - 10:50am W 2:00pm - 4:50pm	Seats (Total: 12) EGR 1202 AVW 1450	Lab
0108	Manoj Franklin W 10:00am - 10:50am Tu 2:00pm - 4:50pm	Seats (Total: 12) EGR 1202 AVW 1450	Lab
0109	Manoj Franklin W 10:00am - 10:50am Th 8:00am - 10:50am	Seats (Total: 12) EGR 1202 AVW 1450	Lab
0110	Manoj Franklin W 10:00am - 10:50am Th 2:00pm - 4:50pm	Seats (Total: 12) EGR 1202 AVW 1450	Lab
0111	Manoj Franklin W 10:00am - 10:50am F 8:00am - 10:50am	Seats (Total: 12) EGR 1202 AVW 1450	Lab

Students must complete all 200-level ENEE courses (or be currently registered in them) before permission will be granted to register for 300- or 400-level ENEE courses.

ENEE303 **Analog and Digital Electronics**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer).

Conceptual operation of transistors and diodes. Large and small signal operation of BJTs and MOSFETs. Basic transistor configurations. Logic circuits and semiconductor memory. Multi-transistor circuits including differential amplifiers and current mirrors. Frequency response.

0101	Agisilaos Iliadis MW 9:30am - 10:45am F 9:00am - 9:50am	Seats (Total: 25) CHM 2201 CHE 2118	Discussion

0102	Agisilaos Iliadis MW 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 25) CHM 2201 CHE 2136	Discussion
0201	Robert Newcomb TuTh 11:00am - 12:15pm M 9:00am - 9:50am	Seats (Total: 25) CHM 2201 EGR 2116	Discussion
0202	Robert Newcomb TuTh 11:00am - 12:15pm M 10:00am - 10:50am	Seats (Total: 25) CHM 2201 EGR 3114	Discussion

ENEE307 **Electronic Circuits Design Laboratory**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE303; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

Students will design and test analog and digital circuits at the transistor level. FETs and BJTs will be covered. The laboratory experiments will be tightly coordinated with ENEE303 materials.

0101	Timothy Horiuchi M 10:00am - 10:50am M 2:00pm - 5:00pm	Seats (Total: 12) EGR 1202 AVW 1330	Lab
0102	Timothy Horiuchi M 10:00am - 10:50am Tu 8:00am - 11:00am	Seats (Total: 12) EGR 1202 AVW 1330	Lab
0103	Timothy Horiuchi M 10:00am - 10:50am Tu 2:00pm - 5:00pm	Seats (Total: 12) EGR 1202 AVW 1330	Lab
0104	Timothy Horiuchi M 10:00am - 10:50am Tu 11:00am - 2:00pm	Seats (Total: 12) EGR 1202 AVW 1330	Lab
0105	Timothy Horiuchi M 10:00am - 10:50am W 2:00pm - 5:00pm	Seats (Total: 12) EGR 1202 AVW 1330	Lab

0107	Timothy Horiuchi M 10:00am - 10:50am Th 2:00pm - 5:00pm	Seats (Total: 12) EGR 1202 AVW 1330	 Lab
0108	Timothy Horiuchi M 10:00am - 10:50am W 8:00am - 11:00am	Seats (Total: 12) EGR 1202 AVW 1330	 Lab
0109	Timothy Horiuchi M 10:00am - 10:50am M 11:00am - 2:00pm	Seats (Total: 12) EGR 1202 AVW 1330	 Lab
0110	Timothy Horiuchi M 10:00am - 10:50am Th 11:00am - 2:00pm	Seats (Total: 12) EGR 1202 AVW 1330	 Lab
0111	Timothy Horiuchi M 10:00am - 10:50am F 8:00am - 11:00am	Seats (Total: 12) EGR 1202 AVW 1330	 Lab
0112	Timothy Horiuchi M 10:00am - 10:50am Th 8:00am - 11:00am	Seats (Total: 12) EGR 1202 AVW 1330	 Lab
0113	Timothy Horiuchi M 10:00am - 10:50am F 11:00am - 2:00pm	Seats (Total: 12) EGR 1202 AVW 1330	 Lab

ENEE313 **Introduction to Device Physics**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer). Credit only granted for: ENEE312 or ENEE313.

Basic physics of devices including fields in solids, crystal structure, properties of electrons and holes. Current flow in Si using drift-diffusion model. Properties of the pn junction. Properties of devices including BJTs, FETs and their physical characteristics.

0101	Neil Goldsman MW 11:00am - 12:15pm F 9:00am - 9:50am	Seats (Total: 20) CHM 0115 EGR 2154	 Discussion

0102	Neil Goldsman MW 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 20) CHM 0115 EGR 2116	Discussion
0201	Danilo Romero TuTh 11:00am - 12:15pm W 11:00am - 11:50am	Seats (Total: 20) AJC 2132 EGR 1102	Discussion
0202	Danilo Romero TuTh 11:00am - 12:15pm W 12:00pm - 12:50pm	Seats (Total: 20) AJC 2132 EGR 3102	Discussion

ENEE313H **Introduction to Device Physics**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer). Credit only granted for: ENEE312 or ENEE313.

Basic physics of devices including fields in solids, crystal structure, properties of electrons and holes. Current flow in Si using drift-diffusion model. Properties of the pn junction. Properties of devices including BJTs, FETs and their physical characteristics.

0101	Neil Goldsman MW 11:00am - 12:15pm F 11:00am - 11:50am	Seats (Total: 15) CHM 0115 EGR 1110	Discussion

ENEE322 **Signal and System Theory**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH246; and minimum grade of C- in ENEE222; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

Concept of linear systems, state space equations for continuous systems, time and frequency domain analysis of signals and linear systems. Fourier, Laplace and Z transforms. Application of theory to problems in electrical engineering.

0101	Alejandra Mercado MW 2:00pm - 3:15pm Th 9:00am - 9:50am	Seats (Total: 25) EGR 1108 CHM 0127	Discussion

0102	Alejandra Mercado MW 2:00pm - 3:15pm Tu 10:00am - 10:50am	Seats (Total: 25) EGR 1108 ATL 2352	 Discussion
0201	Adrianos Papamarcou TuTh 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 25) EGR 1108 EGR 1104	 Discussion
0202	Adrianos Papamarcou TuTh 9:30am - 10:45am F 1:00pm - 1:50pm	Seats (Total: 25) EGR 1108 EGR 1104	 Discussion
0301	Andre Tits TuTh 9:30am - 10:45am F 2:00pm - 2:50pm	Seats (Total: 25) CHE 2118 EGR 0135	 Discussion

ENEE324 **Engineering Probability**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE322; and permission of ENGR-Electrical & Computer Engineering department. Credit only granted for: BMGT231, STAT400 or ENEE324. Additional information: Electrical Engineering and Computer Engineering majors may not substitute STAT400 for ENEE324. These courses are not interchangeable, consult your program requirements or advisor for what is acceptable toward your program of study.

Axioms of probability; conditional probability and Bayes' rules; random variables, probability distribution and densities: functions of random variables: weak law of large numbers and central limit theorem. Introduction to random processes; correlation functions, spectral densities, and linear systems. Applications to noise in electrical systems, filtering of signals from noise, estimation, and digital communications.

ENEE majors (09090) only.

0101	Sennur Ulukus MW 2:00pm - 3:15pm F 12:00pm - 12:50pm	Seats (Total: 25) CHM 2201 CHM 2201	 Discussion
0102	Sennur Ulukus MW 2:00pm - 3:15pm F 1:00pm - 1:50pm	Seats (Total: 25) CHM 2201 CHM 2201	 Discussion

0201	Mark Shayman TuTh 9:30am - 10:45am W 12:00pm - 12:50pm	Seats (Total: 25) JMP 2121 EGR 1102	Discussion
0202	Mark Shayman TuTh 9:30am - 10:45am W 1:00pm - 1:50pm	Seats (Total: 25) JMP 2121 EGR 2154	Discussion
0301	Alexander Barg TuTh 3:30pm - 4:45pm M 2:00pm - 2:50pm	Seats (Total: 25) EGR 0108 EGR 3114	Discussion

ENEE324H **Engineering Probability**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE322; and permission of ENGR-Electrical & Computer Engineering department. Credit only granted for: BMGT231, STAT400 or ENEE324. Additional information: Electrical Engineering and Computer Engineering majors may not substitute STAT400 for ENEE324. These courses are not interchangeable, consult your program requirements or advisor for what is acceptable toward your program of study.

Axioms of probability; conditional probability and Bayes' rules; random variables, probability distribution and densities: functions of random variables: weak law of large numbers and central limit theorem. Introduction to random processes; correlation functions, spectral densities, and linear systems. Applications to noise in electrical systems, filtering of signals from noise, estimation, and digital communications.

0101	Nuno Martins TuTh 9:30am - 10:45am W 2:00pm - 2:50pm	Seats (Total: 15) EGR 3111 ATL 0201	Discussion

ENEE350 **Computer Organization**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE244; and 1 course with a minimum grade of C- from (ENEE150, CMSC132); and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical). Formerly: ENEE250.

Structure and organization of digital computers. Registers, memory, control and I/O. Data and instruction formats, addressing modes, assembly language programming. Elements of system software, subroutines and their linkages.

0101	Charles Silio MW 11:00am - 12:15pm Th 1:00pm - 1:50pm	Seats (Total: 25) CHE 2110 EGR 3114	 Discussion
0102	Charles Silio MW 11:00am - 12:15pm Th 2:00pm - 2:50pm	Seats (Total: 25) CHE 2110 EGR 3114	 Discussion
0201	Yavuz Oruc TuTh 11:00am - 12:15pm F 2:00pm - 2:50pm	Seats (Total: 25) KEB 1200 MTH 0101	 Discussion
0202	Yavuz Oruc TuTh 11:00am - 12:15pm F 3:00pm - 3:50pm	Seats (Total: 25) KEB 1200 MTH 0101	 Discussion

ENEE351 **Algorithms and Data Structures**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE150 and ENEE244. Restriction: Permission of ENGR-Electrical & Computer Engineering department; and must be in the Computer Engineering Minor. Credit only granted for: ENEE351 or CMSC351.

Introduction to fundamental concepts in computer engineering, including topics in discrete math, data structures and algorithms. The course will also include a hands-on programming component. This course will provide students with the tools to design modular, time and space-efficient algorithms for real-world problems.

0101	Yasser Shoukry MW 12:30pm - 1:45pm Th 1:00pm - 1:50pm Tu 1:00pm - 1:50pm	Seats (Total: 20) CHM 0124 AVW 1442 AVW 1442	 Lab Discussion

ENEE359F **Intermediate Topics in Computer Engineering; Advanced FPGA System Design using Verilog**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected intermediate level topics in computer engineering.

Prerequisite: permission of department.

0101	Jerry Wu	Seats (Total: 12)	
	Th 3:30pm - 4:45pm	AVW 2446	
	Tu 2:00pm - 4:50pm	AVW 2446	Lab

ENEE380 **Electromagnetic Theory**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and minimum grade of C- in MATH241, PHYS270, and PHYS271; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in Engineering: Electrical program.

Introduction to electromagnetic fields. Coulomb's law, Gauss's law, electrical potential, dielectric materials capacitance, boundary value problems, Biot-Savart law, Ampere's law, Lorentz force equation, magnetic materials, magnetic circuits, inductance, time varying fields and Maxwell's equations.

ENEE majors (09090) only. Department Permission Required.

0101	Edward Ott	Seats (Total: 25)	
	TuTh 2:00pm - 3:15pm	EGR 1108	
	M 3:00pm - 3:50pm	EGR 3114	Discussion
0102	Edward Ott	Seats (Total: 25)	
	TuTh 2:00pm - 3:15pm	EGR 1108	
	M 4:00pm - 4:50pm	EGR 3114	Discussion

ENEE381 **Electromagnetic Wave Propagation**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE380; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in Engineering: Electrical program.

The electromagnetic spectrum: Review of Maxwell's equations; the wave equation potentials, Poynting's theorem, relationship between circuit theory and fields; propagation of electromagnetic waves in homogeneous media and at interfaces; transmission line theory, waveguides, radiation and antennas.

0101	Edo Waks	Seats (Total: 20)	
	MW 3:30pm - 4:45pm	EGR 1108	
	Th 2:00pm - 2:50pm	CHM 0127	Discussion

0102	Edo Waks MW 3:30pm - 4:45pm Th 3:00pm - 3:50pm	Seats (Total: 20) EGR 1108 ATL 1106	 Discussion
0201	Wesley Lawson TuTh 2:00pm - 3:15pm M 12:00pm - 12:50pm	Seats (Total: 20) EGR 0108 EGR 1102	 Discussion
0202	Wesley Lawson TuTh 2:00pm - 3:15pm M 1:00pm - 1:50pm	Seats (Total: 25) EGR 0108 EGR 3102	 Discussion

ENEE381H **Electromagnetic Wave Propagation**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE380; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in Engineering: Electrical program.

The electromagnetic spectrum: Review of Maxwell's equations; the wave equation potentials, Poynting's theorem, relationship between circuit theory and fields; propagation of electromagnetic waves in homogeneous media and at interfaces; transmission line theory, waveguides, radiation and antennas.

0101	Wesley Lawson TuTh 2:00pm - 3:15pm M 2:00pm - 2:50pm	Seats (Total: 15) EGR 0108 EGR 1110	 Discussion

ENEE397 **Foundational Engineering Mathematics**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH241; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in Engineering: Electrical program.

Foundation mathematics needed to solve problems in various fields of electrical engineering. The course will cover the essential elements of complex numbers, linear algebra and discrete math, multivariable and vector calculus, and elementary differential equations. The emphasis is on learning problem solving techniques. At the end of the course, the student will have acquired proficiency in the application of mathematics to electrical engineering.

Contact department for information to register for this course.

ENEE408A **Capstone Design Project:Microprocessor-Based Design**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: CS

Prerequisite: ENEE440. This course provides a team-based experience in the design and implementation of a microprocessor-based system to solve a real-world problem. A product specification or client requirement forms the basis for the student teams development of an initial technical design specification. The team then divides into smaller groups for the parallel development of hardware and software subsystems of the product device. Upon completion and test of the various subsystems, software and hardware components are integrated into the system prototype and the system is tested and documented.

0101	William Hawkins	Seats (Total: 12)	
	Th 9:30am - 10:45am	EGR 3114	
	TBA	AVW 1454	Lab

ENEE408D **Capstone Design Project: Mixed Signal VLSI Design**

(Perm req)

Credits: 3 | Grading Method: Regular | CORE: CS

Prerequisite: ENEE303, ENEE307, and ENEE313. This course covers the design of very large scale integrated (VLSI) circuits including analysis and simulation of digital and analog circuits, layout, and component selection. The material involves extensive use of Computer-Aided Design (CAD) tools for circuit simulation and layout and draws upon knowledge from 300-level EE courses Following current industry paradigms, students work in teams to design, thoroughly simulate, and specify physical layout of mixed signal VLSI circuits prior to their fabrication in a foundry.

Click here for more course information.

0101	Pamela Abshire	Seats (Total: 30)	
	TuTh 9:30am - 10:20am	KEB 2107	
	F 11:00am - 2:00pm	KEB 2107	Discussion

ENEE408G **Capstone Design Project: Multimedia Signal Processing**

(Perm req)

Credits: 3 | Grading Method: Regular | CORE: CS

Prerequisites: ENEE420 or 425. An introductory course on multimedia signal processing bringing real-world design experience to students using state-of-the-art multimedia software and hardware. Lectures will provide basic theories and principles on multimedia compression, processing, communications, security, and recognition.

Click here for more course information.

0101	Carol Espy-Wilson	Seats (Total: 12)	
	M 9:30am - 10:45am	EGR 2154	
	Tu 12:00pm - 2:50pm	KEB 2107	Lab

ENEE408I **Capstone Design Project: Autonomous Control of Interacting Robots**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: ENEE322; Electrical or Computer Engineering seniors. Co-requisite: ENEE460 or ENEE463. The course involves students in the design,development, and application of autonomous robotic systems. The robots are 4 wheeled vehicles with on-board sensors (cameras, acoustic sensors),computers and wireless communications capabilities. The students work in teams to program the robots to accomplish a task individually and in teams of 2 or more more robots. Applications vary from semester to semester, including racing with passing, soccer, search and identify.

0101	Gilmer Blankenship	Seats (Total: 15)	
	M 10:00am - 10:50am	ITV 1111	
	Tu 11:00am - 1:50pm	KEB 3209	Lab

ENEE408R **Capstone Design Project; Electric Bikes**

(Perm req)

Credits: 3 Grading Method: Regular

Culmination of prior course work in electrical and computer engineering Utilization of modern design tools and methodologies for the design of components or systems under realistic constraints, with particular emphasis on teamwork and oral/written communication. Areas in which projects are currently offered include: microprocessor-based systems, digital systems, VLSI design (both digital and mixed-signal), and optical systems.

Prerequisites: ENEE303, ENEE322, ENEE150 or CMSC216. Electrical or Computer Engineering senior status. Recommended Co-requisites: ENEE474, ENEE463, ENEE426, ENEE440, or ENEE459V. A capstone course on the design of safe, light and utilitarian electric bikes for personal transportation. It is systems level and will make use of a combination of off-the-shelf and custom-made components. These vehicles must meet either one of these design challenges such as extended range superior terrain climbing capability. In addition, the vehicle must contain a plethora of wireless sensors for safety and convenience, such as GPS, on-board cameras, theft deterrent systems, communications and navigation. It must be able to operate under different road conditions, at all hours and even in slightly inclement weather.

0101	Romel Gomez	Seats (Total: 15)	
	Th 5:00pm - 6:50pm	KEB 1200	
	F 9:00am - 11:00am	KEB 1200	Lab
0102	Romel Gomez	Seats (Total: 15)	
	Th 5:00pm - 6:50pm	KEB 1200	
	F 9:00am - 11:00am	KEB 1200	Lab

ENEE408T **Capstone Design Project; Accelerator Physics - Building the Maryland 5 MeV Cyclotron**

(Perm req) Credits: 3 Grading Method: Regular

Culmination of prior course work in electrical and computer engineering Utilization of modern design tools and methodologies for the design of components or systems under realistic constraints, with particular emphasis on teamwork and oral/written communication. Areas in which projects are currently offered include: microprocessor-based systems, digital systems, VLSI design (both digital and mixed-signal), and optical systems.

Prerequisite: ENEE380. Corequisite: ENEE381 or PHYS411; or permission of instructor. Restriction: Permission of ECE department. Cyclotrons are versatile accelerators whose use, because of an unsurpassed economic footprint, continues to expand in basic research, industry, medicine, and education. They also capture most of fundamentalphysics and technology of the biggest particle accelerators, such as CERN's LHC. This course provides students with a hands-on introduction to fundamental beam physics as well as the technology of cyclotrons, their design, commissioning, and operation. Students of this course will be designing and building a cyclotron.

0101	Timothy Koeth, Brian Beaudoin	Seats (Total: 12)	
	TuTh 9:30am - 10:45am	EGR 1102	
	F 9:00am - 12:00pm	EGR 0312	Lab

ENEE408U **Capstone Design Project; Unmanned Air Vehicle Design**

(Perm req) Credits: 3 Grading Method: Regular

Culmination of prior course work in electrical and computer engineering Utilization of modern design tools and methodologies for the design of components or systems under realistic constraints, with particular emphasis on teamwork and oral/written communication. Areas in which projects are currently offered include: microprocessor-based systems, digital systems, VLSI design (both digital and mixed-signal), and optical systems.

Prerequisites: Completion of ENEE303 and ENEE381 with "C-" or better; OR Permission of the ECE Department. This proposed course will provide a team-based experience in the design and implementation of an electronics-based system to solve an unmanned vehicle problem. The UASTS technical challenge is the basis for the team's development of an initial technical design specification. Groups within the team pursue the parallel development of hardware and software subsystems of the product or device. Upon completion and test of the various subsystems, software and hardware components are integrated into the system prototype and the system is tested and documented.

Contact department for information to register for this course.

ENEE413 **Advanced Electronic Devices**

(Perm req) Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE303. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical) ; and permission of ENGR-Electrical & Computer Engineering department. Credit only granted for: ENEE413 or ENEE480. Formerly: ENEE480.

Advanced devices and their physical operation, providing a thorough description of those parts not usually covered in introductory electronics courses. These include Schottky and tunnel junctions, negative resistance devices used in wireless communication, homo-structure compound semiconductor transistors, hetero-structure (quantum effect) transistors, non-volatile memory devices, photonic devices such as LEDs and solid-state lasers, solar cells, photo-detectors and camera imagers, as well as bio-related components. Special consideration will be given to achieve an understanding of noise processes that limit electronic device performance. In all cases, system-level applications will be illustrated.

0101	Kevin Daniels MW 12:30pm - 1:45pm	Seats (Total: 30) EGR 3106	

ENEE417 **Microelectronics Design Laboratory**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE303; and minimum grade of C- in ENEE307; and must have earned a minimum grade of regular (letter) C- in all required 200-level ENEE courses; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer).

Students design and build fairly sophisticated circuits, mainly compose of discrete transistors and integrated circuits. Many of the projects are designed to require that students synthesize from what they have learned in many of the disciplines in electrical engineering. Students learn they can actually use their knowledge to build something very practical, which may include a high-fidelity amplifier, a radio, a memory cell, a transmitter, etc.

0101	Robert Newcomb Tu 2:00pm - 2:50pm W 2:00pm - 5:00pm	Seats (Total: 8) EGR 2154 Location: TBA	 Lab
0102	Robert Newcomb Tu 2:00pm - 2:50pm W 2:00pm - 5:00pm	Seats (Total: 8) EGR 2154 Location: TBA	 Lab

ENEE425 **Digital Signal Processing**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE322; and completion of all lower-division technical courses in the EE curriculum.

Sampling as a modulation process; aliasing; the sampling theorem; the Z-transform and discrete-time system analysis; direct and computer-aided design of recursive and nonrecursive digital filters; the Discrete Fourier Transform (DFT) and Fast Fourier Transform (FFT); digital filtering using the FFT; analog-to-digital and digital-to analog conversion; effects of quantization and finite-word-length arithmetic.

ENEE majors (09090) only.

0101	Raghuveer Rao	Seats (Total: 30)
	MW 3:30pm - 4:45pm	AJC 2121

ENEE426 **Communication Networks**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE324; and completion of all lower-division technical courses in the EE curriculum. Restriction: Must be in Engineering: Electrical program.

The main design issues associated with computer networks, satellite systems, radio nets, and general communication networks. Application of analytical tools of queuing theory to design problems in such networks. Review of proposed architectures and protocols.

0101	Mark Shayman	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ITV 1111

ENEE428 **Communications Design Laboratory**

(Perm req)

Credits: 2 Grading Method: Regular

EE capstone design course. Exploring the signal processing and communication systems theoretical concepts presented in ENEE 420 Communication Systems and ENEE 425 Digital Signal Processing by implementing them on actual DSP based hardware in real time.

Prerequisite: ENEE324; Corequisite: ENEE425 or ENEE420. This course explores the signal processing and communication system theoretical concepts presented in ENEE 322 Signals and Systems, ENEE 324 Engineering Probability, ENEE 420 Communication Systems, and ENEE 425 Digital Signal Processing by implementing them on actual hardware in real time. In the process, students gain experience using equipment commonly used in industry, such as, oscilloscopes, spectrum analyzers, error rate test sets, channel simulators, digital signal processors, analog-to-digital and digital-to-analog converters, and signal generators. The experiments are based on using a Texas Instruments TMS320C6713 DSP Starter Kit (DSK) stand-alone board that communicates with the PC through a USB port.

0101	Steven Tretter W 10:00am - 10:50am F 9:00am - 12:00pm	Seats (Total: 8) AVW 1366 AVW 1362	 Lab
0102	Steven Tretter W 10:00am - 10:50am W 2:00pm - 5:00pm	Seats (Total: 8) AVW 1366 AVW 1362	 Lab

ENEE439M **Topics in Signal Processing; Machine Learning**

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in signal processing.

Prerequisite: ENEE324 or STAT400, Programming skills in Matlab, C+, or Python. Restriction: permission of Electrical & Computer Engineering Department. Students taking the course as CMSC498M must have completed CMSC330 and CMSC351 with a minimum grade of C-. A broad introduction to machine learning and statistical pattern recognition. Topics include: Supervised learning (Bayesian learning and classifier, parametric/non-parametric learning, discriminant functions, support vector machines, neural networks, deep learning networks); Unsupervised learning (clustering, dimensionality reduction, autoencoders). The course will also discuss recent applications of machine learning, such as computer vision, data mining, autonomous navigation, and speech recognition.

0101	Behtash Babadi MW 3:30pm - 4:45pm	Seats (Total: 48) EGR 1202

ENEE440 **Microprocessors**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE350; and completion of all lower division technical courses in the EE curriculum. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

Microprocessor architectures, instruction sets, and applications. Bus structures, memory, I/O interfacing. Assembly language programming, LSI device configuration, and the embedding of microprocessors in systems.

0101	William Hawkins TuTh 12:30pm - 1:45pm	Seats (Total: 30) EGR 2154

ENEE445 **Computer Laboratory**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; or minimum grade of C- in ENEE206. And minimum grade of C- in ENEE350; and must have earned a minimum grade of regular (letter) C- in all 200-level ENEE courses; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

This laboratory course focuses on the hardware/software interface in computer systems. Hand-on experiments are used to teach design, construction, analysis, and measurement of both hardware and software for embedded systems. Projects emphasize using microcontrollers for control, sensing, and communication through various I/O devices.

0101	William Hawkins	Seats (Total: 12)	
	Tu 9:30am - 10:45am	EGR 3114	
	Th 2:00pm - 5:00pm	AVW 1454	Lab

ENEE446 **Digital Computer Design**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE350; and completion of all lower-division technical courses in the EE curriculum. Restriction: Permission of ENGR-Electrical & Computer Engineering department. Credit only granted for: ENEE446 or CMSC411.

Hardware design of digital computers. Arithmetic and logic units, adders, multipliers and dividers. Floating-point arithmetic units. Bus and register structures. Control units, both hardwired and microprogrammed. Index registers, stacks, and other addressing schemes. Interrupts, DMA and interfacing.

ENEE majors (09090) only.

0101	Uzi Vishkin	Seats (Total: 50)
	MW 11:00am - 12:15pm	EGR 1108
0201	Yavuz Oruc	Seats (Total: 50)
	TuTh 3:30pm - 4:45pm	KEB 1110

ENEE447 **Operating Systems**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (CMSC414, CMSC417, CMSC420, CMSC430, CMSC433, CMSC435, ENEE440, ENEE457); and permission of ENGR-Electrical & Computer Engineering department; and (ENEE350, CMSC330, and CMSC351). Restriction: Must be in Engineering: Computer program; and permission of ENGR-Electrical & Computer Engineering department. Credit only granted for: ENEE447, CMSC412, or ENEE459S. Formerly: ENEE459S.

The course will present the theory, design, implementation and analysis of computer operating systems. Through classroom lectures, homework, and projects, students learn the fundamentals of concurrency, process management, interprocess communication and synchronization, job scheduling algorithms, memory management, input-output devices, file systems, and protection and security in operating systems. Optional topics may include communications protocols, computer security, and real-time operating systems. The lectures will be complemented with a significant level of programming, bringing up a simple operating system from scratch, concurrently as the topics are discussed in lecture. A weekly recitation section will provide TA support and an informal laboratory atmosphere. Each student will have their own board, so development will be done largely outside the classroom at each student's pace.

0101	Bruce Jacob TuTh 11:00am - 12:15pm M 12:00pm - 1:50pm	Seats (Total: 15) EGR 1108 AVW 1442	 Lab
0102	Bruce Jacob TuTh 11:00am - 12:15pm M 2:00pm - 3:50pm	Seats (Total: 15) EGR 1108 AVW 1442	 Lab
0103	Bruce Jacob TuTh 11:00am - 12:15pm W 12:00pm - 1:50pm	Seats (Total: 15) EGR 1108 AVW 1442	 Lab
0104	Bruce Jacob TuTh 11:00am - 12:15pm W 2:00pm - 3:50pm	Seats (Total: 15) EGR 1108 AVW 1442	 Lab

ENEE456 **Cryptography**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: (CMSC106, CMSC131, or ENEE150; or equivalent programming experience); and (2 courses from (CMSC330, CMSC351, ENEE324, or ENEE380); or any one of these courses and a 400-level MATH course, or two 400-level MATH courses). Or permission of instructor. Also offered as: CMSC456, MATH456. Credit only granted for: MATH456, CMSC456 or ENEE456.

The theory, application, and implementation of mathematical techniques used to secure modern communications. Topics include symmetric and public-key encryption, message integrity, hash functions, block-cipher design and analysis, number theory, and digital signatures.

0101	Lawrence Washington TuTh 11:00am - 12:15pm	Seats (Total: 86) ATL 2324	

0201	Jonathan Katz TuTh 2:00pm - 3:15pm	Seats (Total: 140) ESJ 2208	
0301	Dana Dachman-Soled MW 2:00pm - 3:15pm	Seats (Total: 45) CSI 3117	

ENEE461 **Control Systems Laboratory**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and minimum grade of C- in ENEE322; and must have earned a minimum grade of regular (letter) C- in all required 200-level ENEE courses; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical). Credit only granted for: ENEE461, ENME461, or ENME489N.

Students will design, implement, and test controllers for a variety of systems. This will enhance their understanding of feedback control and familiarize them with the characteristics and limitations of real control devices. They will also complete a small project. This will entail writing a proposal, purchasing parts for their controller, building the system, testing it, and writing a final report describing what they have done.

Prerequisite: permission of department. Also offered as ENME461. Credit granted for ENME461 or ENEE461.

0101	William Levine MW 9:00am - 9:50am M 1:00pm - 3:50pm	Seats (Total: 14) KEB 1110 KEB 3209	 Lab
0102	William Levine MW 9:00am - 9:50am W 1:00pm - 3:50pm	Seats (Total: 14) KEB 1110 KEB 3209	 Lab
0103	William Levine MW 9:00am - 9:50am F 9:00am - 11:50am	Seats (Total: 14) KEB 1110 KEB 3209	 Lab
0104	William Levine MW 9:00am - 9:50am W 10:00am - 12:50pm	Seats (Total: 14) KEB 1110 KEB 3209	 Lab

ENEE463 **Digital Control Systems**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE322; and completion of lower-division technical courses in the EE curriculum. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer). Formerly: ENEE469E.

Introduction to techniques for the analysis and design of linear contro systems and implementation of control systems using digital technology. Topics include linearization, solution of linear equations, z-transforms and Laplace transforms, design of linear controllers, optimal control, and digital implementation of control designs. Students will use MATLAB for the solution of problems and the design of control systems.

0101	Gilmer Blankenship MW 2:00pm - 3:15pm	Seats (Total: 30) EGR 3106	

ENEE473 **Electrical Machines Laboratory**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and must have earned a minimum grade of regular (letter) C- in all required 200-level ENEE courses; and permission of ENGR-Electrical & Computer Engineering department. Recommended: ENEE322. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer).

Experiments involving single and three phase transformers, induction machines, synchronous machines and D.C. machines.

0101	David Bowen F 1:00pm - 1:50pm F 2:00pm - 5:00pm	Seats (Total: 12) JMP 1109 Location: TBA	 Lab
0102	David Bowen F 1:00pm - 1:50pm F 9:00am - 12:00pm	Seats (Total: 12) JMP 1109 Location: TBA	 Lab

ENEE475 **Power Electronics**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE303; and must have earned a minimum grade of regular (letter) C- in all required 200-level ENEE courses; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer).

This course is suitable for undergraduate and graduate students who wan to learn the basic principles of power electronics and its applications. Special emphasis is placed on interdisciplinary nature of power electronics. Strong and intimate connections between power electronics and circuit theory, electronic circuits, semiconductor devices, electric power, magnetic, motor drives and control are stressed.

0101	Isaak Mayergoyz	Seats (Total: 75)
	TuTh 2:00pm - 3:15pm	KEB 1110

ENEE488 **Independent Study in Electrical and Computer Engineering**

(Perm req)

Credits: 1-3 Grading Method: Regular

The purpose is to provide students with an opportunity for independent study projects on advanced electrical and computer engineering topics. These projects typically involve academic investigations of technical themes that are not addressed in the established elective and special topics courses taught by the department on a regular basis. Study plans are tailored to students educational goals but are approved and supervised by faculty.

Contact department for information to register for this course.

ENEE489A **Topics in Electrophysics; Laboratory for Antennas for Wireless Personal Communication**

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in electrophysics.

0101	Donghun Park	Seats (Total: 10)	
	Tu 12:30pm - 1:45pm	AVW 2446	
	Th 11:00am - 2:00pm	AVW 2446	Lab

Prerequisites: ENEE 381 or equivalent. A senior level advanced laboratory course designed to provide hands-on exposure on concepts of antennas design, including computer modeling, fabrication and testing of small scale antennas used in personal communication systems. The course builds upon the concepts of electromagnetic wave introduced in ENEE381. Students will learn how to use state of the art microwave testing apparatus and techniques, simulate electromagnetic properties based on geometry as well as design, build and test several prototype antenna configurations.

ENEE489E **Topics in Electrophysics; Wireless Energy Transfer: Principles, Technologies, and Applications**

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in electrophysics.

Prerequisites: Completion of ENEE303 and ENEE381 with "C-" or better; OR Permission of the ECE Department. This course will deal with the current state-of-the-art in wireless energy transfer technology. It will elucidate the electromagnetic principles in the design of the receiving antenna and will discuss the various schemes to achieve optimal coupling in the near- and far-field regimes. The basic principles of power and radio electronics applied to the design of power delivery circuits will also be covered in this course. The use of simulation software such as FEKO and SPICE for computational electromagnetics and electronic simulations, respectively, will be used in the design of wireless power delivery systems. Modern commercial applications of wireless energy transfer such as wireless charging of UAV drones will be discussed.

Contact department for information to register for this course.

ENEE489I **Topics in Electrophysics; Solar Energy Conversion**

Credits: 3 Grading Method: Regular

Selected topics of current importance in electrophysics.

0101	Jeremy Munday	Seats (Total: 30)	
	TuTh 3:30pm - 4:45pm	EGR 2116	

ENEE489M **Topics in Electrophysics; Active Microwave Devices Design & Testing Laboratory**

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in electrophysics.

Prerequisite: Completion of ENEE381 with a minimum grade of a "C-" or Permission from ECE Department. Design, fabrication, and testing of active RF and microwave devices. These devices include detectors, power and low-noise amplifiers, local oscillators, frequency multipliers, mixers, and a culminating assignment to design asuperheterodyne receiver. The theory covered to develop and characterize these devices include impedance matching, scattering parameters, quality factor and bandwidth, stability, gain, noise figure, and nonlinear effects. Students will become proficient in simulating designs using Keysight Advanced Design System (ADS).

0101	Charles Turner	Seats (Total: 15)	
	W 11:00am - 11:50am	AVW 2446	
	F 12:00pm - 2:50pm	AVW 1458	Lab

ENEE489Q **Topics in Electrophysics; Quantum Phenomena in Electrical Engineering**

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in electrophysics.

Prerequisite: Completion of ENEE380 with a minimum grade of a "C-." Completion of all lower-division technical courses in EE curriculum. Co-requisites: ENEE313 and ENEE381. The course provides fundamental understanding of quantum mechanical principles for electrical engineering and nanotechnology applications. It is designed to acquaint electrical and computer engineering students with concepts on which modern electronic and optical devices are based. Topics include: wave phenomena and wave-particle duality, photons and quantum states, entanglement, paradoxes, quantum crytography, Schrodingers equation in 1-dimension, bound states, tunneling, scattering problems, optoelectronic and electronic devices and superconducting Josephson's junctions.

0101	Julius Goldhar	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	EGR 2116

ENEE489Y **Topics in Electrophysics; Introduction to US Navy Mission Systems Testing**

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in electrophysics.

Prerequisites: Completion ENEE322, ENEE324, and ENEE381 with "C-" or better; OR Permission of the ECE Department. This course is a survey treatment of the engineering theory and operation of a variety of US Navy mission systems installed on US Navy aircraft. The systems covered will be a range of technical discipline areas including communications, navigation, electro-optical, radar, and electronic-warfare systems. The course will discuss fundamental engineering theory of system operations and will include topical coverage of electromagnetic principles, communication theory, data networks, navigation principles, and both electro-optical and radar physics. Additional system discussions will include Unmanned Aviation Systems and electronic-warfare systems.

Contact department for information to register for this course.

ENEE496 **Lasers and Electro-optic Devices**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE381; and completion of all lower-division technical courses in the EE curriculum. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

Modern physical optics: Gaussian beams, optical resonators, optical waveguides; theory of laser oscillation, rate equations; common laser systems. Selected modern optoelectronic devices like detectors and modulators. Role of lasers and optoelectronics in modern technology.

0101	Mario Dagenais	Seats (Total: 30)
	MW 3:30pm - 4:45pm	EGR 3106

ENEE498K **Topics in Electrical Engineering; Advanced Design Lab on Electric Cars**

Credits: 3 Grading Method: Regular

Selected topics of current importance in electrical engineering.

Prerequisite: completion of ENEE303 with a minimum grade of a "C-" and senior standing in Electrical or Computer Engineering. Recommended prerequisites: ENEE476, ENEE475, ENEE408K, or ENME408. An advanced laboratory course, with the purpose of designing a formula type electrical car with the objective of participating in Formula SAE competition. This is a systems level laboratory course, which will eventually use a combination of off-the-shelf components. The major components inside the electric car include electric motor, power inverter, drive circuit, battery, battery management system, sensors and encoders and charger. The course will provide various hands-on experiences involving different experiments on motors, inverters, dc/dc converters, and their overall integration, verification and testing on the environment of a real car. Through this laboratory course, the students will be exposed to the iterative design process forrealizing better system performance.

0101	Alireza Khaligh	Seats (Total: 25)	
	W 11:00am - 11:50am F 11:00am - 1:50pm	AJC 2132 Location: TBA	Lab

ENEE499 **Senior Projects in Electrical and Computer Engineering**

(Perm req)

Credits: 1-5 Grading Method: Regular

The purpose is to provide students with an opportunity to engage in independent research projects on advanced electrical and computer engineering topics. Projects are selected by students and supervised by faculty and other qualified mentors. While students may be required to acquire new skills or information in the course of completing a 499 project, the focus is to conduct an independent investigation of a technical theme by the student. The project may be used to satisfy the advanced lab requirement if it is approved as a primarily - experimental research project. In that case, the student will enroll in ENEE499L.

ENEE majors (09090) only.

Contact department for information to register for this course.

ENEE499L **Senior Projects in Electrical and Computer Engineering**

(Perm req)

Credits: 1-3 Grading Method: Regular

The purpose is to provide students with an opportunity to engage in independent research projects on advanced electrical and computer engineering topics. Projects are selected by students and supervised by faculty and other qualified mentors. While students may be required to acquire new skills or information in the course of completing a 499 project, the focus is to conduct an independent investigation of a technical theme by the student. The project may be used to satisfy the advanced lab requirement if it is approved as a primarily - experimental research project. In that case, the student will enroll in ENEE499L.

Contact department for information to register for this course.

ENEE499R **Senior Projects in Electrical and Computer Engineering**

(Perm req)

Credits: 1-3 Grading Method: Regular

The purpose is to provide students with an opportunity to engage in independent research projects on advanced electrical and computer engineering topics. Projects are selected by students and supervised by faculty and other qualified mentors. While students may be required to acquire new skills or information in the course of completing a 499 project, the focus is to conduct an independent investigation of a technical theme by the student. The project may be used to satisfy the advanced lab requirement if it is approved as a primarily - experimental research project. In that case, the student will enroll in ENEE499L.

Contact department for information to register for this course.

ENEE499T **Senior Projects in Electrical and Computer Engineering; Undergraduate Teaching Experience**

(Perm req)

Credits: 1-2 Grading Method: Regular

The purpose is to provide students with an opportunity to engage in independent research projects on advanced electrical and computer engineering topics. Projects are selected by students and supervised by faculty and other qualified mentors. While students may be required to acquire new skills or information in the course of completing a 499 project, the focus is to conduct an independent investigation of a technical theme by the student. The project may be used to satisfy the advanced lab requirement if it is approved as a primarily - experimental research project. In that case, the student will enroll in ENEE499L.

Contact department for information to register for this course.

ENEE601 **Semiconductor Devices and Technology**

Credits: 3 Grading Method: Regular, Audit

Recommended: ENEE413 and ENEE600. Credit only granted for: ENEE601 or ENEE697. Formerly: ENEE697.

The principles, structures and characteristics of semiconductor devices Technology and fabrication of semiconductor devices.

0101	Agisilaos Iliadis	Seats (Total: 30)
	MW 12:30pm - 1:45pm	JMP 1202

ENEE611 **Integrated Circuit Design and Analysis**

Credits: 3 Grading Method: Regular, Audit

Recommended: ENEE610. Credit only granted for: ENEE611 or ENEE696. Formerly: ENEE696.

Active and passive elements used in semiconductor structures. Design application of linear and digital integrated circuits.

0101	Timothy Horiuchi	Seats (Total: 30)
	MW 3:30pm - 4:45pm	EGR 0135

ENEE612 **Advanced Power Electronics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE303, ENEE475, or ENEE476; or students who have taken courses with comparable content may contact the department. Credit only granted for: ENEE719B or ENEE612. Formerly: ENEE719B.

Advanced power electronic converters, techniques to model and control switching circuits, pulse width modulation, resonant switch converters, resonant DC-link converters, series and parallel loaded resonant (SLR, PLR) DC-DC converters, zerovoltage switching clamped-voltage (ZVS-CV) converters, ZVS resonant-switch DC-DC converters are explained. In addition, this course deals with small-signal and large-signalmodeling and control of switched mode power converters, sliding-mode operation, state space models, generalized state-space averaging, and feedback linearization techniques. Multiple-input converters and their operational principles are explained. Furthermore, practical design procedures for type II and type III compensators with voltage-mode error-amplifier for DC/DC converters are explained.

0101	Alireza Khaligh	Seats (Total: 30)
	MW 2:00pm - 3:15pm	AJC 2132

ENEE620 **Random Processes in Communication and Control**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE324; or students who have taken courses with comparable content may contact the department.

Introduction to random processes: characterization, classification, representation; Gaussian and other examples. Linear operations on random processes, stationary processes: covariance function and spectral density. Linear least square waveform estimating Wiener-Kolmogroff filtering, Kalman-Bucy recursive filtering: function space characterization, non-linear operations on random processes.

0101	Alexander Barg	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	CHE 2118

ENEE621 **Estimation and Detection Theory**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE620; or students who have taken courses with comparable content may contact the department.

Estimation of unknown parameters, Cramer-Rao lower bound; optimum (map) demodulation; filtering, amplitude and angle modulation, comparison with conventional systems; statistical decision theory Bayes, minimax, Neyman/Pearson, Criteria-68 simple and composite hypotheses; application to coherent and incoherent signal detection; M-ary hypotheses; application to uncoded and coded digital communication systems.

0101	Richard La	Seats (Total: 40)
	MW 12:30pm - 1:45pm	CSI 3120

ENEE625 Multi-user Communication

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE620.

Basic queueing models. Store-and forward communications networks; switching modes; delay-throughput measures; capacity assignment; routing; topological design; computational aspects; flow control; error control; protocols; specification and validation; local networks; satellite and packet radio systems; multiple access schemes; stability and performance; multi-user information theory; and large scale system theory.

0101	Anthony Ephremides	Seats (Total: 20)
	MW 9:30am - 10:45am	AJC 2119

ENEE627 Information Theory

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE620. Credit only granted for: ENEE627 or ENEE721. Formerly: ENEE721.

Information measures and their properties; entropy, relative entropy an mutual information. Information source models. Lossless data compression: the Kraft inequality, Shannon-Fano and Huffman codes. Typical sequences, asymptotic equipartition property, lossy source coding. Discrete memoryless channels: capacity, channel coding theorem. The additive Gaussian channel. Source coding under a fidelity constraint: rate distortion function and rate distortion theorem.

0101	Prakash Narayan	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm	AJC 2121

ENEE631 **Digital Image and Video Processing**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE620 and ENEE630; or students who have taken courses with comparable content may contact the department.

Foundations of digital image and video processing. Topics covered: 2-D systems and transforms; image acquisition and perception; multi-dimensional sampling; quantization; linear and non-linear techniques for image enhancement and restoration; basics on image analysis; lossless and lossy image compression; motion estimation and compensation; still image and video coding standards; applications of image and video processing.

0101	Min Wu	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	EGR 2116

ENEE634 **Learning and Statistical Signal Processing**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE620 and ENEE630.

Adaptive learning and statistical signal processing, including: numerical analysis; principal component analysis and support vector machines; adaptive signal processing (supervised learning); blind equalization and identification (unsupervised learning); antenna array and MIMO signal processing; space-time and space-time-frequency coding; neural networks (nonlinear adaptive learning); advanced topics on machine learning, such as online and deep learning.

0101	KJ Ray Liu	Seats (Total: 30)
	MW 2:00pm - 3:15pm	CHM 1228

ENEE640 **Digital CMOS VLSI Design**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE303 and ENEE350; or students who have taken courses with comparable content may contact the department; or permission of instructor.

Review of MOS transistors: fabrication, layout, characterization; CMOS circuit and logic design: circuit and logic simulation, fully complementary CMOS logic, pseudo-nMOS logic, dynamic CMOS logic, pass-transistor logic, clocking strategies; sub system design: ALUs, multipliers, memories, PLAs; architecture design: datapath, floorplanning, iterative cellular arrays, systolic arrays; VLSI algorithms; chip design and test: full custom design of chips, possible chip fabrication by MOSIS and subsequent chip testing.

0101	Ankur Srivastava	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	EGR 3106

ENEE645 **Compilers and Optimization**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE350 or CMSC216; or students who have taken courses with comparable content may contact the department. Credit only granted for: ENEE645 or ENEE759C. Formerly: ENEE759C.

The compilation, linking and loading process. Using lexical analyzers and parsers. Intermediate forms. Global, stack and heap objects, and their addressing modes. Stack implementation. Control flow analysis and optimization. Dataflow analysis and optimization including Static, single assignment. Alias analysis.

0101	Rajeev Barua	Seats (Total: 45)
	TuTh 12:30pm - 1:45pm	AJC 2121

ENEE661 **Nonlinear Control Systems**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE660; and (MATH410 or MATH411; or students who have taken courses with comparable content may contact the department). Or permission of instructor.

State space methods of stability analysis including second order systems and the phase plane, linearization and stability in the small, stability in the large and Lyapunov's second method. Frequency domain methods including the describing function. Popov's method and functional analytic methods. Introduction to Volterra series representations of nonlinear systems. Applications to conrol system design.

0101	Eyad Abed	Seats (Total: 30)
	MW 11:00am - 12:15pm	EGR 2116

ENEE664 **Optimal Control**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE660 and MATH410; or students who have taken courses with comparable content may contact the department; or permission of instructor. Corequisite: MATH411; or permission of instructor.

General optimization and control problems. Conditions of optimality for unconstrained and constrained optimization problems; sensitivity; duality. Introduction to linear and nonlinear programming methods. Dynamic optimization. Discrete time maximum principle and applications. Pontryagin maximum principle in continuous time. Dynamic programming. Feedback realization of optimal control.

0101	Perinkulam Krishnaprasad	Seats (Total: 30)
	MW 2:00pm - 3:15pm	AJC 2121

ENEE681 **Electromagnetic Theory II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE381; or students who have taken courses with comparable content may contact the department.

Continuation of ENEE 680. Theoretical analysis and engineering applications of Maxwell's equations. The homogeneous wave equation. Plane wave propagation. The interaction of plane waves and material media. Retarded potentials. The Hertz potential. Simple radiating systems. Relativisitic covariance of Maxwell's equations.

0101	Wesley Lawson	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	EGR 3106

ENEE691 **Optical Communication Systems**

Credits: 3 Grading Method: Regular, Audit

Optical components and systems. Measures of performance of optical communication systems. Topics include: single and multi-mode optical fibers, DFB and DBR lasers, transmitters and receivers, pin and APD detectors, noise analysis, receiver sensitivity modulation formats, system performance, bit-error-rate, power budget, TDM and WDM systems, network architecture.

0101	Mario Dagenais	Seats (Total: 30)
	MW 11:00am - 12:15pm	EGR 2154

ENEE698C **Graduate Seminar; CONTROLS**

Credits: 1 Grading Method: Regular, Audit, Sat-Fail

Every semester regular seminars are held in electrical science and in the six areas of specialization offered by the electrical engineering department. They may be taken, by arrangement with the student's advisor, for repeated credit.

0101	Eyad Abed	Seats (Total: 20)
	W 3:30pm - 4:20pm	CHE 2145

ENEE698E **Graduate Seminar; Microelectronics**

Credits: 1-2 Grading Method: Regular, Audit, Sat-Fail

Every semester regular seminars are held in electrical science and in the six areas of specialization offered by the electrical engineering department. They may be taken, by arrangement with the student's advisor, for repeated credit.

0101	Robert Newcomb	Seats (Total: 20)
	Tu 5:00pm - 5:50pm	CSI 2118

ENEE698Q **Graduate Seminar; Colloquium Series**

Credits: 1 Grading Method: Regular, Audit, Sat-Fail

Every semester regular seminars are held in electrical science and in the six areas of specialization offered by the electrical engineering department. They may be taken, by arrangement with the student's advisor, for repeated credit.

0101	Joseph JaJa	Seats (Total: 80)
	F 3:30pm - 4:30pm	KEB 1110

ENEE699 **Independent Studies in Electrical Engineering**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Supervised individual study or project, or supervised group study or project, at an advanced level, in electrical engineering.

Contact department for information to register for this course.

ENEE769M **Advanced Topics in Controls; Robotics**

Credits: 3 Grading Method: Regular, Audit

Topics selected, as announced every semester, from the field of controls and its applications.

0101	Dinesh Manocha	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	IRB 2107

ENEE789M **Advanced Topics in Electrophysics; Quantum Technology**

Credits: 3 Grading Method: Regular, Audit

Topics selected, as announced every semester, from the field of electrophysics and its applications.

Prerequisite: A good grounding in electromagnetism and quantum mechanics is necessary; familiarity with density matrices and master equations will be helpful. Also offered as ENEE789M. Credit only granted for PHYS720, PHYS798M, or ENEE789M. Physical principles behind emerging quantum technologies, from quantum-limited amplifiers to atomic simulators. Examination of current and emerging platforms for quantum technologies, including neutral atom, ion trap, superconducting circuit, photonic, and spin-based approaches. Focus on hurdles for implementing quantum devices for new applications.

0101	Jacob Taylor, Mohammad Hafezi	Seats (Total: 25)
	MW 3:00pm - 4:15pm	ATL 2330

ENEE790 **Quantum Electronics I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have knowledge of quantum mechanics; or permission of instructor.

Spontaneous emission, interaction of radiation and matter, masers, optical resonators, the gas, solid and semi-conductor lasers, electro-optical effect, propagation in anisotropic media and light modulation.

0101	Julius Goldhar	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	EGR 1104

ENEE799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENEE889 **Teaching Workshop**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Provide training in education for senior PhD students who contemplate a academic career, and give them the opportunity to gain some teaching experience. Emphasis is on issues that are of special importance in electrical and computer engineering education.

Contact department for information to register for this course.

ENEE898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular, Sat-Fail

Provide training in education for senior PhD students who contemplate a academic career, and give them the opportunity to gain some teaching experience. Emphasis is on issues that are of special importance in electrical and computer engineering education.

Contact department for information to register for this course.

ENEE899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENES Engineering Science Spring 2019

ENES100 **Introduction to Engineering Design**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSSP

Corequisite: MATH140.

Students work as teams to design and build a product using computer software for word-processing, spreadsheet, CAD, and communication skills.

Credit granted for ENES100 or ENES100A.

0101	Michael Galczynski MW 10:00am - 11:50am Class time/details on ELMs	Seats (Total: 37) JMP 1116 ONLINE
0102	Catherine Hamel MW 10:00am - 11:50am Class time/details on ELMs	Seats (Total: 37) JMP 1215 ONLINE
0201	Kevin Calabro TuTh 10:00am - 11:50am Class time/details on ELMs	Seats (Total: 37) JMP 1116 ONLINE
0202	Patrick McAvoy TuTh 10:00am - 11:50am Class time/details on ELMs	Seats (Total: 37) JMP 1215 ONLINE

0301	Christopher Davis MW 12:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 37) JMP 1116 ONLINE
0302	Jackelyn Lopez Roshwalb MW 12:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 37) JMP 1215 ONLINE
0401	Michael Galczynski TuTh 12:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 37) JMP 1116 ONLINE
0402	Catherine Hamel TuTh 12:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 36) JMP 1215 ONLINE
0501	W Ethan Eagle MW 2:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 33) JMP 1116 ONLINE
0502	Ayush Gupta MW 2:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 37) JMP 1215 ONLINE
0601	W Ethan Eagle TuTh 2:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 37) JMP 1116 ONLINE
0701	Taylor Myers MW 8:00am - 9:50am Class time/details on ELMs	Seats (Total: 32) JMP 1116 ONLINE
0801	Nick Wagman TuTh 5:00pm - 6:50pm Class time/details on ELMs	Seats (Total: 37) JMP 1116 ONLINE

ENES100A **Introduction to Engineering Design**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSSP

Corequisite: MATH140.

Students work as teams to design and build a product using computer software for word-processing, spreadsheet, CAD, and communication skills.

Restricted to non-engineering students. Credit granted for ENES100 or ENES100A.

0101	Michael Galczynski MW 10:00am - 11:50am Class time/details on ELMs	Seats (Total: 3) JMP 1116 ONLINE
0102	Catherine Hamel MW 10:00am - 11:50am Class time/details on ELMs	Seats (Total: 3) JMP 1215 ONLINE
0201	Kevin Calabro TuTh 10:00am - 11:50am Class time/details on ELMs	Seats (Total: 3) JMP 1116 ONLINE
0202	Patrick McAvoy TuTh 10:00am - 11:50am Class time/details on ELMs	Seats (Total: 3) JMP 1215 ONLINE
0301	Christopher Davis MW 12:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 3) JMP 1116 ONLINE
0302	Jackelyn Lopez Roshwalb MW 12:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 3) JMP 1215 ONLINE
0401	Michael Galczynski TuTh 12:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 3) JMP 1116 ONLINE
0402	Catherine Hamel TuTh 12:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 4) JMP 1215 ONLINE
0501	W Ethan Eagle MW 2:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 7) JMP 1116 ONLINE

0502	Ayush Gupta MW 2:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 3) JMP 1215 ONLINE	
0601	W Ethan Eagle TuTh 2:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 3) JMP 1116 ONLINE	
0701	Taylor Myers MW 8:00am - 9:50am Class time/details on ELMs	Seats (Total: 8) JMP 1116 ONLINE	
0801	Nick Wagman TuTh 5:00pm - 6:50pm Class time/details on ELMs	Seats (Total: 3) JMP 1116 ONLINE	

ENES102 **Mechanics I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Corequisite: MATH140. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering. Formerly: ENES110.

The equilibrium of stationary bodies under the influence of various kinds of forces. Forces, moments, couples, equilibrium, trusses, frames and machines, centroids, moment of inertia, beams, friction, stress/strain, material properties. Vector and scalar methods are used to solve problems.

0101	Gary Pertmer MW 9:00am - 9:50am F 9:00am - 10:50am	Seats (Total: 54) KEB 1200 EGR 1108	 Discussion
0201	Jarred Young TuTh 2:00pm - 2:50pm F 2:00pm - 3:50pm	Seats (Total: 54) SPH 1301 JMP 3201	 Discussion
0402	Jarred Young Tu 4:00pm - 5:50pm Th 4:00pm - 5:50pm	Seats (Total: 54) CHE 2108 CHE 2108	 Discussion
0601	Thomas Beigel MW 10:00am - 10:50am F 10:00am - 11:50am	Seats (Total: 54) EGR 0108 CSI 1122	 Discussion

0701	Thomas Beigel MW 12:00pm - 12:50pm F 12:00pm - 1:50pm	Seats (Total: 54) EGR 0108 CSI 1122	 Discussion
0801	Michael Galczynski MW 1:00pm - 1:50pm F 1:00pm - 2:50pm	Seats (Total: 54) PHY 1201 CHM 0115	 Discussion

ENES108 **Achieving College Success: First Year Transition**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

An exploration of the skills and habits needed to successfully complete the first year of study for Science, Technology, Engineering, and Mathematics (STEM) majors. This course is an extension of the college success seminars taught during the Summer Bridge Program.

0101	Olive Reid, LaWanda Kamalidiin M 6:00pm - 6:50pm	Seats (Total: 18) EGR 3106
0102	LaWanda Kamalidiin, Olive Reid M 5:30pm - 6:30pm	Seats (Total: 20) EGR 3114

ENES114 **Virtus Seminar II**

Credits: 1 Grading Method: Regular

Prerequisite: ENES113. Restriction: Students must be participants in the Virtus Living and Learning Community.

Focus on personal and professional development with engineering with a strong emphasis on career development. Learn to employ strategies and skills for academic and professional success.

0101	Zabrina Anzyl W 4:00pm - 5:15pm	Seats (Total: 50) PHY 1201
0201	Zabrina Anzyl Contact instructor or department for details.	Seats (Total: 20)

ENES116 **FLEXUS Living and Learning Community Seminar II**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES115.

The seminar focuses on personal and professional development by enhancing technical ability, understanding educational options through minors and student projects in engineering, identifying and employing strategies and skills for academic and professional success, and developing career commitment through networking and mentoring. Students develop professional portfolios in preparation for a future internship or job.

0101	Veronica Perrigan W 4:00pm - 5:15pm	Seats (Total: 60) ESJ 1215
0102	Veronica Perrigan Contact instructor or department for details.	Seats (Total: 10)

ENES140 **Discovering New Ventures**

Credits: 3 Grading Method: Regular General Education: DSSP

Additional information: This course may count as an elective for a student at the University of Maryland, depending on the student's specific degree program. It cannot be counted towards the requirements for the Smith School of Business Entrepreneurship Fellow Program.

Students explore dynamic company startup topics by working in teams to design a new venture. This multi-disciplinary course helps students to learn the basic business, strategy, and leadership skills needed to launch new ventures. Topics include learning how to assess the feasibility of a startup venture, as well as how to apply best practices for planning, launching, and managing new companies. Students discuss a wide range of issues of importance and concern to entrepreneurs and learn to recognize opportunities, assess the skills and talents of successful entrepreneurs, and learn models that help them navigate uncertainty.

A Fearless Ideas Course from the Academy for Innovation & Entrepreneurship (AIE): http://ter.ps/iamFEARLESS Click here for more information on the Fearless Ideas Courses.

0101	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0201	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0301	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0401	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0501	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE

0601	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0701	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0801	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
0901	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE
1001	James Green Class time/details on ELMs	Seats (Total: 250) ONLINE

ENES190H **Introduction to Design and Quality**

Credits: 4 Grading Method: Regular General Education: DSSP

Prerequisite: Must be in the Quest program. Also offered as: BMGT190. Credit only granted for: BMGT190 or ENES190.

QUEST students learn and apply design practices to design new products and services. Working in multidisciplinary teams, students use quality and process improvement methods to identify, analyze, and recommend solutions to real-world problems.

Restricted to QUEST program students. Also offered as BMGT190H. Credit granted for BMGT190H or ENES190H.

0101	Pamela Armstrong TuTh 12:30pm - 1:45pm Tu 6:00pm - 7:50pm	Seats (Total: 45) ESJ 2212 VMH 1412	 Discussion

ENES210 **Entrepreneurial Opportunity Analysis and Decision-Making in 21st Century Technology Ventures**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: IE General Education: DSSP, SCIS

Credit only granted for: ENES210 or ENES461.

This multi-disciplinary course helps students learn the principles of entrepreneurial opportunity analysis and decision-making in an increasingly dynamic and technically-inclined society. Emphasis is placed on how aspiring technology entrepreneurs can develop their entrepreneurial perspectives to develop winning entrepreneurial plans for their future ventures.

0101	James Green Class time/details on ELMs M 9:00am - 9:50am	Seats (Total: 120) ONLINE ESJ 2204
0102	James Green Class time/details on ELMs M 10:00am - 10:50am	Seats (Total: 120) ONLINE ESJ 1202
0103	James Green Class time/details on ELMs M 11:00am - 11:50am	Seats (Total: 120) ONLINE ESJ 1202
0104	James Green Class time/details on ELMs W 9:00am - 9:50am	Seats (Total: 120) ONLINE ESJ 2204
0105	James Green Class time/details on ELMs W 10:00am - 10:50am	Seats (Total: 120) ONLINE ESJ 1202
0106	James Green Class time/details on ELMs W 11:00am - 11:50am	Seats (Total: 120) ONLINE ESJ 1202
0107	James Green Class time/details on ELMs Tu 2:00pm - 2:50pm	Seats (Total: 120) ONLINE ESJ 1202
0108	James Green Class time/details on ELMs Th 2:00pm - 2:50pm	Seats (Total: 120) ONLINE ESJ 1202

ENES214 **Virtus Seminar IV**

(Perm req)

Credits: 1 Grading Method: Regular

Prerequisite: Students must have completed ENES213. Restriction: Students must be participants in the Virtus Living and Learning Community.

Students continue to develop their leadership and mentoring skills, participate in networking opportunities and explore their interest in special engineering topics.

0101	Elizabeth Kurban W 4:00pm - 5:15pm	Seats (Total: 40) PLS 1119	

ENES216 **FLEXUS Living and Learning Community Seminar IV**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES115, ENES116, and ENES215. Restriction: Restricted to second year FLEXUS participants.

The seminar focuses on gender diversity and its cross-sections with culture. Students continue to enhance their leadership and mentoring skills, participate in networking opportunities with women in leadership roles and careers in engineering, and engage in opportunities for outreach and service-learning. Students will also complete a culminating semester project.

0101	Mary Bowden, Julia Anderson W 4:00pm - 5:15pm	Seats (Total: 40) CHM 1224	
0102	Julia Anderson, Mary Bowden Contact instructor or department for details.	Seats (Total: 35)	
0103	Julia Anderson, Mary Bowden Th 4:15pm - 5:30pm	Seats (Total: 30) CHM 1224	

ENES220 **Mechanics II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ENES102; and (MATH141 and PHYS161). Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; and must not be in Engineering: Electrical program.

Stress and deformation of solids-rods, beams, shafts, columns, tanks, and other structural, machine and vehicle members. Topics include stress transformation using Mohr's circle; shear and moment diagrams; derivation of elastic curves; and Euler's buckling formula. Design problems related to this material are given in lab.

0101	Thomas Beigel MW 2:00pm - 2:50pm F 2:00pm - 3:50pm	Seats (Total: 55) EGR 0108 CSI 1122	 Discussion

0103	Teng Li MW 10:00am - 10:50am F 10:00am - 11:50am	Seats (Total: 55) KEB 1110 PLS 1140	Discussion
0104	Robert Bonenberger MW 2:00pm - 2:50pm F 2:00pm - 3:50pm	Seats (Total: 55) CHE 2110 CHE 2108	Discussion
0105	Robert Bonenberger MW 11:00am - 11:50am F 11:00am - 12:50pm	Seats (Total: 55) KEB 1200 CHM 0115	Discussion

ENES221 **Dynamics**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ENES102; and (MATH141 and PHYS161). Restriction: Must be in a major in ENGR-A. James Clark School of Engineering.

Systems of heavy particles and rigid bodies at rest and in motion. Force-acceleration, work-energy and impulse-momentum relationships. Motion of one body relative to another in a plane and in space.

Engineering College (04) only.

0101	James Duncan TuTh 9:00am - 9:50am F 9:00am - 10:50am	Seats (Total: 57) TYD 2106 KEB 1110	Discussion
0102	Kenneth Kiger TuTh 1:00pm - 1:50pm F 1:00pm - 2:50pm	Seats (Total: 57) PLS 1130 KEB 1200	Discussion
0104	Patrick McAvoy TuTh 1:00pm - 1:50pm F 1:00pm - 2:50pm	Seats (Total: 57) CHE 2110 SPH 1301	Discussion

ENES232 **Thermodynamics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS261 and PHYS260. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering. Credit only granted for: BIOE232, CHBE301, ENCH300, ENES232, ENME320, or ENME232. Formerly: ENME232 and ENME320.

Introduction to thermodynamics. Thermodynamic properties of matter. First and second laws of thermodynamics, cycles, reactions, and mixtures.

0101	Christopher Cadou MW 10:00am - 10:50am F 9:00am - 10:50am	Seats (Total: 58) ATL 1113 ESJ 1202	 Discussion
0102	Christopher Cadou MW 11:00am - 11:50am F 11:00am - 12:50pm	Seats (Total: 58) ATL 1113 ESJ 1202	 Discussion
0201	Raymond Sedwick MW 1:00pm - 1:50pm F 1:00pm - 2:50pm	Seats (Total: 58) EGR 1108 EGR 1108	 Discussion
0301	Catherine Hamel MW 3:00pm - 3:50pm F 2:00pm - 3:50pm	Seats (Total: 58) PLS 1130 PLS 1130	 Discussion
0601	Jarred Young MW 10:00am - 10:50am F 10:00am - 11:50am	Seats (Total: 58) JMP 3201 JMP 3201	 Discussion

ENES304 **RISE Seminar**

Credits: 1 Grading Method: Regular

Restriction: Must be in the Engineering RISE Leadership Program; and permission of ENGR-A. James Clark School of Engineering.

This is the first semester of a two semester sequence taken by RISE students in their first semester in the program. T he purpose of ENES 304 is for RISE students to learn about leadership, acquire leadership skills, and understand how to integrate leadership theories and concepts in engineering practice. There will be a mix of formal lectures by course faculty and lectures by distinguished speakers who can provide their own experience of what leadership means and how it is acquired. Students will explore their own leadership philosophy and leadership capacities in the context of group practice. Students will make meaning of general leadership theories and concepts and understand how to apply them to engineering industry. Students will also gain understanding of leadership through the stories shared by distinguished speakers with industrial, governmental and academic experience.

Contact department for information to register for this course.

ENES305 **RISE Leadership Seminar**

(Perm req)

Credits: 1 Grading Method: Regular

Prerequisite: Permission of ENGR-A. James Clark School of Engineering; and ENES304.

This is the second semester of a two semester sequence taken by RISE students in their final semester in the program. The purpose of ENES 305 is for RISE students to learn about leadership, acquire leadership skills, and understand how to integrate leadership theories and concepts in engineering practice. There will be a mix of formal lectures by course faculty and lectures by distinguished speakers who can provide their own experience of what leadership means and how it is acquired. Students will explore their own leadership philosophy and leadership capacities in the context of group practice. Students will make meaning of general leadership theories and concepts and understand how to apply them to engineering industry. Students will also gain understanding of leadership through the stories shared by distinguished speakers with industrial, governmental and academic experience.

0101	William Fourney, Natasha Chapman, Jane Fines, Kenneth Kiger W 5:00pm - 6:00pm	Seats (Total: 38) EGR 0135

ENES317 **Introduction to Engineering Leadership**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: Permission of ENGR-A. James Clark School of Engineering.

Focus is placed on general leadership theories in addition to real-world applications of leadership in engineering education, industry, and government.

Restricted to students in the Engineering Leadership Development minor (#EN04) and the Global Engineering Leadership minor (#EN09). All others may go on the holdfile.

0101	Natasha Chapman M 5:00pm - 6:45pm Class time/details on ELMs	Seats (Total: 45) EGR 0108 ONLINE

ENES390H **Systems Thinking for Managerial Decision Making**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES190 or BMGT190. Restriction: Must be in the QUEST program. Also offered as: BMGT390. Credit only granted for: BMGT390 or ENES390.

QUEST students develop an understanding of complex systems that incorporate elements of business and technical design and analyze how these systems evolve over time and may be shaped by technology disruptions, internal decisions, and external forces. Students apply these concepts to real-world complex systems in a team environment.

0101	Joseph Bailey	Seats (Total: 50)
	TuTh 3:30pm - 4:45pm	ESJ 1215

ENES397 **Mentoring Design and Quality Teams**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Restricted to QUEST Program (TQMP) students. Also offered as: BMGT397. Credit only granted for: BMGT397 or ENES397.

QUEST students practice essential skills for mentoring and coaching multidisciplinary teams. These include effective communications, facilitation, conflict resolution, and the ability to motivate. Students will practice these skills as mentors for student teams from BMGT/ENES 190H. In the process, they will strengthen their knowledge of design and quality techniques.

0101	Pamela Armstrong	Seats (Total: 10)
	Tu 5:00pm - 7:40pm	VMH 1415

ENES424 **Engineering Leadership Capstone**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES472, ENCE320, and ENES317; and permission of ENGR-A. James Clark School of Engineering. Recommended: ENES100.

The work initiated in the Introduction to Engineering Leadership course brings together further exploration of leadership styles and concepts.

Contact department for information to register for this course.

ENES440 **Science, Technology and Society: Certificate Program Capstone**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Science, Technology and Society certificate program; or permission of ENGR-A. James Clark School of Engineering. Credit only granted for: ENES440 or UNIV401. Formerly: UNIV401.

Capstone research seminar for students in the Science, Technology and Society certificate program.

0101	David Tomblin	Seats (Total: 25)
	Contact instructor or department for details.	
	Contact instructor or department for details.	

ENES458B **Topics in International Engineering; Engineers Without Borders: Leadership Seminar-Brazil**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

A variety of topics related to engineering in a global context are discussed including cultural aspects, cross-cultural communication, international standards and law, and engineering and technology issues, business behavior, attitudes and values of selected countries and regions.

Contact department for information to register for this course.

ENES458I **Topics in International Engineering; Engineers Without Borders Project Implementation**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

A variety of topics related to engineering in a global context are discussed including cultural aspects, cross-cultural communication, international standards and law, and engineering and technology issues, business behavior, attitudes and values of selected countries and regions.

Contact department for information to register for this course.

ENES458N **Topics in International Engineering; The Global Engineer**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

A variety of topics related to engineering in a global context are discussed including cultural aspects, cross-cultural communication, international standards and law, and engineering and technology issues, business behavior, attitudes and values of selected countries and regions.

0101	Jane Fines	Seats (Total: 1)
	Class time/details on ELMs	ONLINE

ENES460 **Fundamentals of Technology Start-Up Ventures**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Maryland Technology Enterprise Institute. Credit only granted for: ENES460, BMGT461 or HLMN470. Additional information: Course may not be used to fulfill any BMGT major or minor program requirement.

Fundamental aspects of creating, organizing, funding, managing, and growing a technology startup venture. This multidisciplinary course will draw on management, business, legal, financial, as well as technical, concepts. Students form teams and develop a business plan for a technology company, based on each team's own business idea and then present the plan to a panel of outside experts.

0101	Michael Pratt	Seats (Total: 40)
	Class time/details on ELMs	ONLINE
	Restricted to students in Minor in Technology Entrepreneurship	
0201	Mark Komisky	Seats (Total: 25)
	Th 5:00pm - 5:50pm	SQH 1111
	Class time/details on ELMs	ONLINE

ENES461 **Advanced Entrepreneurial Opportunity Analysis in Technology Ventures**

Credits: 3 Grading Method: Regular

Credit only granted for: ENES210 or ENES461.

Explores the factors that influence entrepreneurial opportunity analysis in technology-based ventures. Uses a cognitive theoretical framework to examine the integration of motivation, emotions and information processing modes to make complex entrepreneurial decisions in technology venture environments.

Credit only granted for ENES210 or ENES461.

0101	James Green	Seats (Total: 280)
	Class time/details on ELMs	ONLINE
0201	James Green	Seats (Total: 280)
	Class time/details on ELMs	ONLINE

ENES462 **Marketing High-Technology Products and Innovations**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ENGR-Maryland Technology Enterprise Institute. Additional information: Course may not be used to fulfill any BMGT major or minor program requirement.

Examines the opportunities and challenges of marketing high-technology products in turbulent environments requiring rapid decision making with incomplete information. Explores how innovations are introduced at frequent intervals, research-and-development spending is vital, and there are high mortality rates for both products and businesses.

0101	Olufunlola Koiki, James Green	Seats (Total: 40)
	TuTh 5:00pm - 6:15pm	SCC 2121
	Restricted to student enrolled in the Hinman CEO (HCEO) program.	
0201	Olufunlola Koiki	Seats (Total: 30)
	Class time/details on ELMs	ONLINE
	Restricted to students in Minor in Technology Entrepreneurship	

ENES466 **Leading and Financing the Technology Venture**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ENGR-Maryland Technology Enterprise Institute. Credit only granted for: ENES466, BMGT365 or HLMN471. Additional information: Course may not be used to fulfill any BMGT major or minor program requirement.

Focuses on the challenges of leading and financing new technology ventures. Leadership topics include team selection and formation, aligning rewards with relative contributions of team members, and how early decisions can enable or prevent founders from achieving results that align with their individual motivations for becoming an entrepreneur. Essential tools and methods for building a strong financial foundation for a new technology venture are examined. Includes important accounting principles as well as methods for keeping financial control of the technology venture. Insights are shared on navigating the multitude of financial barriers that may block your entrepreneurial success, as well as how to grow the technology venture from concept through launch.

0101	Michael Pratt	Seats (Total: 42)
	Class time/details on ELMs	ONLINE
	Restricted to students in the Minor in Technology Entrepreneurship	

ENES472 **International Business Cultures in Engineering and Technology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Prerequisite: Permission of ENGR-A. James Clark School of Engineering. Restriction: Sophomore standing or higher. Also offered as: SLLC472. Credit only granted for: ARHU439B, ARHU439E, ARHU439T, ENES472, SLLC471, SLLC472, or SLLC473. Formerly: ARHU439T.

The goal is to provide students with an understanding of cultural aspects pertaining to global business and engineering and develop the cultural understanding, attitudes, and communication skills needed to function appropriately within an increasingly global and multicultural working environment.

Restricted to students with the minor in international engineering (#EN01), engineering leadership development (#EN04), and global engineering leadership (#EN09). Students in global poverty (#AG06), in terrorism studies (#BS07), or in international development and conflict management (#BS02) may request permission for the course from Natasha Chapman (chapman3@umd.edu). All other students can be placed on a hold file.

0101	Natasha Chapman Th 6:00pm - 7:45pm Class time/details on ELMs	Seats (Total: 45) EGR 0108 ONLINE

ENES481 **Engineering Honors Seminar II**

Credits: 1 Grading Method: Regular

Restriction: Must be in College of Engineering Honors; and junior standing or higher.

Introduction to engineering creativity and innovation in engineering. Application of methods of creativity to topics in communication, conducting research, and leadership.

0101	Richard McCuen Tu 8:00am - 8:50am	Seats (Total: 20) EGR 1104

ENES489A **Special Topics in Engineering; Applied Quantitative Analysis**

Credits: 3-6 Grading Method: Regular, Pass-Fail, Audit

Special topics in engineering.

Restricted to QUEST students. Also offered as ENES498A. Credit granted for BMGT438A or ENES489A.

0101	Joshua Kohn, David Ashley M 5:00pm - 7:40pm	Seats (Total: 12) VMH 1326

ENES489P **Special Topics in Engineering; Hands-on Systems Engineering Projects**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in engineering.

This hands-on design projects course will expose senior-level undergraduates and graduate students from all areas of engineering to to exciting career opportunities in the systems engineering field. Students will be introduced to the technical aspects of systems engineering practice through team-based project development and a systematic step-by-step procedure for product development that includes defining operations concepts, requirements gathering and organization, synthesis of models of system behavior and system structure, functional allocationto create system design alternatives, formal assessment of design alternatives through tradeoff analysis, and established approaches to testing and validation/verification. The students will be introduced to modern methods in Model-Based Systems Engineering, and industrial strength tools and environments for complex systems synthesis. Team projects may address problems from a wide variety of disciplines or cross-disciplines.

0101	John Baras Tu 3:30pm - 4:45pm Th 3:30pm - 4:55pm	Seats (Total: 30) KEB 1200 AVW 1442	 Lab
0201	John Baras Tu 3:30pm - 4:45pm Th 5:00pm - 6:30pm	Seats (Total: 30) KEB 1200 AVW 1442	 Lab

ENES489Q **Special Topics in Engineering; Design and Innovation in Silicon Valley**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in engineering.

Prerequisite: BMGT190H or ENES190H. Restricted to QUEST Program students. Also offered as BMGT438G. Credit granted for BMGT438G or ENES489Q. Travel to Silicon Valley during Spring Break required of all class participants.

0101	Jessica Roffe Th 7:45pm - 8:45pm Contact instructor or department for details.	Seats (Total: 15) VMH 1415

ENES490H **Quest Consulting and Innovation Practicum**

Credits: 4 Grading Method: Regular General Education: DSSP

Prerequisite: ENES390 or BMGT390. Also offered as: BMGT490. Credit only granted for: BMGT490 or ENES490.

The capstone course for the QUEST Honors Program provides students with an opportunity to learn in multidisciplinary teams of business, engineering, and science students in a real-world setting. Companies engage teams of QUEST students with real organizational challenges and dedicate resources to help students address these problems. Student teams must enhance their skills in quality management, process improvement, and systems design and will apply these to add value to a client. In the process, students will improve their teamwork skills.

Restricted to QUEST program students. Also offered as BMGT490H. Credit granted for BMGT490H or ENES490H.

0101	David Ashley, Christina Elson W 5:00pm - 7:40pm Contact instructor or department for details.	Seats (Total: 45) VMH 1415

ENES491 **Defining Consulting and Innovation Projects**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: BMGT190 or ENES190. Restriction: Restricted to QUEST Program (TQMP) students. Also offered as: BMGT491. Credit only granted for: BMGT491 or ENES491.

QUEST students cultivate relationships with new and current corporate partners and prepare project scopes for QUEST's introductory course, BMGT/ENES 190H, and capstone course, BMGT/ENES 490H. Requires independent work communicating with clients and class visits to a variety of potential project sites.

0101	Jessica Roffe Tu 9:30am - 12:15pm	Seats (Total: 9) VMH 1407

ENES498E **Special Topics in Entrepreneurship; Entrepreneurship in Chemical and Life Sciences**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This entrepreneurship seminar and case study-based course will explore technology entrepreneurship with a focus on leadership, marketing, team-building, and management of new technology ventures and assumes baseline knowledge of entrepreneurship. Students will learn skills needed to succeed as a technology entrepreneur and how to apply best practices for planning, launching, and growing new companies. This course is a requirement of the Hinman CEOs program.

Also offered as CHEM498E and BIOE489E. Credit granted for CHEM498E or ENES498E or BIOE489E.

0101	Ben Woodard Th 2:00pm - 4:45pm	Seats (Total: 30) HBK 0115

ENES498R **Special Topics in Entrepreneurship; Fearless Founders: New Venture Practicum**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

This entrepreneurship seminar and case study-based course will explore technology entrepreneurship with a focus on leadership, marketing, team-building, and management of new technology ventures and assumes baseline knowledge of entrepreneurship. Students will learn skills needed to succeed as a technology entrepreneur and how to apply best practices for planning, launching, and growing new companies. This course is a requirement of the Hinman CEOs program.

Prerequisite: Permission of ENGR-A. James Clark School of Engineering. Also offered as BMGT468R. Credit granted for BMGT468R or ENES498R.

0101	Oliver Schlake M 5:00pm - 7:40pm	Seats (Total: 25) VMH 3330H

ENES601 **Future Faculty Program Seminar I**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Restriction: Must be in the Clark School Future Faculty Program.

Introduction to and development of skills necessary to obtain and succeed in a university faculty position. Emphasis on technical writing and effective presentations. Discussion of research diversification, networking, ethics and professionalism.

0101	Thomas Antonsen Th 3:30pm - 4:45pm	Seats (Total: 25) ATL 2316

ENES603 **Future Faculty Program Seminar III**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Restriction: Must be in the Clark School Future Faculty Program.

Developing a successful faculty research program. Establishing and maintaining a research group. Finding funding opportunities and writing grant proposals. Mentoring graduate students. Faculty position application process. Preparing research and teaching statements.

0101	Alison Flatau, Norman Wereley Th 3:30pm - 4:30pm	Seats (Total: 25) KEB 1200

ENES604 **Future Faculty Program Teaching Practicum**

Credits: 1 Grading Method: Regular, Audit

Prerequisite: ENES602. Restriction: Must be a graduate student in the Clark School Future Faculty Program; and students for whom English is not the native language must pass the Maryland English Institute ITA Evaluation prior to enrolling in this course.

Graduate students will co-teach a course under supervision of a faculty mentor. Graudate students will be involved in all aspects of the course including development of syllabus, presenting lectures, writing and grading examiniations, and evaluating the students in the course.

Restricted to the students in the Future Faculty program.

0101	Ankur Srivastava	Seats (Total: 25)
	Contact instructor or department for details.	

ENES662 Innovative Ideas and Concept Development

Credits: 3 Grading Method: Regular

Enables aspiring entrepreneurs to understand the content, methods, and models for new venture opportunity assessment and analysis. Focuses on how to identify and analyze entrepreneurial opportunities for technology-based ventures by first understanding the personal self and decision-making factors. Explores how to evaluate new venture opportunities and challenges within industries and markets.

PLM1	James Green	Seats (Total: 50)
	Meets February 25, 2019 - May 17, 2019	
	Class time/details on ELMs	ONLINE
	Restricted to students in the MPTE Program.	

ENES663 Strategies for Managing Innovation

Credits: 3 Grading Method: Regular

Credit only granted for: ENES663 or ENPM691.

Emphasizes how innovative leaders can use strategic management of innovation and technology to enhance firm performance. It helps students to understand the process of technological change; the ways that firms come up with innovations; the strategies that firms use to benefit from innovation; and the process of formulating technology strategy. It provides frameworks for analyzing key aspects of these industries and teaches students how to apply these frameworks.

PLM1	Thomas Mierzwa	Seats (Total: 50)
	Meets February 25, 2019 - May 17, 2019	
	Class time/details on ELMs	ONLINE
	Restricted to students in the MPTE Program.	

ENES666 **Creative Design, Prototyping, and Testing**

Credits: 3 Grading Method: Regular

Prerequisite: ENES664 and ENES665.

Transition from creative, innovative, design thinking methods to prototyping and concept testing of products and services. Learn how to translate ideas into marketable offerings to create real value for customers and the new venture. Emphasis is placed on an integrated and interdisciplinary approach to engineering design, concurrent engineering, design for manufacturing, industrial design, and the business of new product development. Topics include design methods, modeling and simulation, material and manufacturing process selection, platform and modular design, mass customization, planning and scheduling, and business issues, teamwork, group dynamics, creativity, and innovation.

PLM1	Cait von Schnetlage	Seats (Total: 50)
	Meets February 25, 2019 - May 17, 2019	
	Class time/details on ELMs	ONLINE
	Restricted to students in the MPTE Program.	

ENES667 **Market Development and Commercialization**

Credits: 3 Grading Method: Regular

Prerequisite: ENES664 and ENES665.

Provides an orientation to key marketing concepts critical to marketing technology-based products and services. Learn to identify market opportunities, understand customer preferences, evaluate market acceptance, and devise the appropriate going to market strategies for the new venture.

PLM1	Daniel Dearing	Seats (Total: 50)
	Meets February 25, 2019 - May 17, 2019	
	Class time/details on ELMs	ONLINE
	Restricted to students in the MPTE Program.	

ENES672 **Launching Technology Startup Ventures**

Credits: 6 Grading Method: Regular

Prerequisite: ENES670 and ENES671. Credit only granted for: ENES660 or ENES672.

Explores the processes and skills needed to launch and manage technology startup ventures. Learn how to apply best practices for planning, launching, and leading new companies. Discusses a wide range of issues of importance and concern to entrepreneurs, to include how to navigate uncertainty.

PLM1	Mark Komisky	Seats (Total: 10)
	Meets February 25, 2019 - May 17, 2019	
	Class time/details on ELMs	ONLINE
	Restricted to students in the MPTE program.	
PLM2	Douglas Britton	Seats (Total: 10)
	Meets February 25, 2019 - May 17, 2019	
	Class time/details on ELMs	ONLINE
	Restricted to students in the MPTE program.	

ENFP Engineering, Fire Protection Spring 2019

ENFP101 **Introduction to Fire Protection Engineering**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Fire Protection Engineering department. Credit only granted for: ENFP108 or ENFP101. Formerly: ENFP108.

This course will introduce students to the impact of fire on people, property and the environment and methods to mitigate the threat of fire. Student teams will apply the principles of fire behavior and fire safety systems covered in the first half of the course to design, build and test a fire safe, small-scale apartment. A final experiment will be conducted to provide an assessment of the complete designs of each team.

0101	Peter Sunderland	Seats (Total: 20)
	M 12:00pm - 12:50pm	JMP 1109

ENFP201 **Numerical Methods with MatLab**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH141. Restriction: Must be in Engineering: Fire Protection program.

A broad range of numerical methods are illustrated and applications related to engineering problems are implemented using Mat Lab thus providing a working knowledge of this computational tool. The topics covered in the course include: finding roots of equations with bracketing and open methods; solving linear systems of equations with matrices, Gauss elimination, LU decomposition, and iterative methods; linear regression, polynomial interpolation; numerical integration and numerical differentiation; ordinary and partial differential equations. Additional topics such as optimization, eigenvalues, Fourier analysis, splines, and Romberg integration may be included as time allows.

0101	Marino diMarzo, Stanislav Stoliarov TuTh 2:00pm - 3:15pm	Seats (Total: 20) LEF 1220	

ENFP300 **Fire Protection Fluid Mechanics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH246 and ENFP201; and must have completed or be concurrently enrolled in PHYS260, PHYS261, and ENES232. Restriction: Permission of ENGR-Fire Protection Engineering department.

Presents students with the fundamental properties of fluids and fluid movement. Both static and dynamic fluid problems will be considered with an emphasis on fire protection systems.

0101	Fernando Raffan Montoya TuTh 9:30am - 10:45am W 12:00pm - 12:50pm	Seats (Total: 40) CHM 1228 ITV 1111	 Discussion

ENFP320 **Fire Assessment Methods and Laboratory**

(Perm req)

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENFP312. Restriction: Must be in Engineering: Fire Protection program.

Experimental evaluation of ignition, flame spread, rate of heat release and smoke production of furnishings and interior finish materials.

0101	Peter Sunderland TuTh 12:30pm - 1:45pm W 12:00pm - 1:15pm	Seats (Total: 10) CSI 2107 JMP 3229	 Lab
0102	Peter Sunderland TuTh 12:30pm - 1:45pm W 1:00pm - 2:15pm	Seats (Total: 11) CSI 2107 JMP 3229	 Lab

0103	Peter Sunderland TuTh 12:30pm - 1:45pm W 2:00pm - 3:15pm	Seats (Total: 10) CSI 2107 JMP 3229	 Lab
0104	Peter Sunderland TuTh 12:30pm - 1:45pm W 3:00pm - 4:15pm	Seats (Total: 10) CSI 2107 JMP 3229	 Lab

ENFP350 **Professional Development Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ENGR-Fire Protection Engineering department. Restriction: Junior standing or higher.

An integrative, upper level professional development seminar covering topics such as engineering ethics, professional licensing, codes and standards, intellectual property, career selection and various contemporary issues in fire protection engineering.

0101	Anthony Militello M 4:00pm - 4:50pm	Seats (Total: 25) PLS 1115	
0102	Anthony Militello M 5:00pm - 5:50pm	Seats (Total: 25) PLS 1115	

ENFP410 **Special Hazard Suppression Systems**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENFP310 and ENFP312. Restriction: Permission of ENGR-Fire Protection Engineering department. Credit only granted for: ENFP410 or ENFP653.

Analysis of application and theory of fire suppression systems. The key elements of fire suppression systems will be discussed along with how they interact for effective fire suppression design. Physical mechanisms for a variety of fire suppression approaches will be discussed including hose streams, sprinklers, water mist, foam, clean agents, and chemical agents.

0101	Kenneth Isman TuTh 9:30am - 10:45am	Seats (Total: 45) KEB 1200	

ENFP411 **Risk-Informed Performance Based Design**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Senior standing; or permission of ENGR-Fire Protection Engineering department.

Appraisal and measurement of fire safety. Application of systems analysis, probability theory, engineering economy and risk management in the identification and synthesis of components of fire protection engineering. Methods for the development of criteria for the design, evaluation and assessment of fire safety or component hazards.

0101	James Milke	Seats (Total: 50)	
	TuTh 5:00pm - 6:15pm	IRB 1207	
	Tu 6:15pm - 7:15pm	IRB 1207	Discussion

ENFP426 **Computational Methods in Fire Protection**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENFP425. Restriction: Permission of ENGR-Fire Protection Engineering department.

Introduction to computer-based fire modeling: zone modeling and Computational Fluid Dynamics (CFD); documentation of input data, validation and verification tests.

0101	Arnaud Trouve	Seats (Total: 50)
	TuTh 2:00pm - 3:15pm	TYD 1132

ENFP429 **Independent Studies**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

For students who have definite plans for individual study of approved problems, or study of an advanced topic selected in conjunction with the faculty.

Senior standing. For ENFP majors only.

Contact department for information to register for this course.

ENFP440 **Smoke Management and Fire Alarm Systems**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed with a C- or better or concurrently be enrolled in ENFP300. Restriction: Permission of ENGR-Fire Protection Engineering department. Also offered as: ENFP627. Credit only granted for: ENFP440 or ENFP627.

Analysis of hazard posed by smoke in buildings. Performance characteristics of smoke management systems. Review of analytical design aids. Functional analysis and design of fire detection and alerting systems. Examination and evaluation of code criteria, performance specifications and research.

0101	Kenneth Isman	Seats (Total: 43)
	TuTh 11:00am - 12:15pm	PHY 4221

ENFP465 **Fire and Explosion Investigations**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Student should have senior standing. Restriction: Permission of ENGR-Fire Protection Engineering department. Also offered as: ENFP665. Credit only granted for: ENFP489N, ENFP629N OR ENFP665. Formerly: ENFP489N. Additional information: The course will be taught as a dual senior-level undergraduate course and graduate course.

Presents an overview of fire and explosion investigation and reconstruction. Information on field techniques, applicable standards and best practices will be presented along with how fire science and fire dynamics can be applied to forensic analysis. Additionally laboratory work will be conducted to illustrate the application of fire dynamics to forensic scenes to assist in the determination of cause and evaluation of potential fire growth scenarios. Sample experiments include 2nd item ignition tests, ignition delay tests, and the course culminates with a series of 1:12 reduced scale house burns to allow the students to investigate and document a fire. This course also qualifies the student to sit for the NAFI Certified Fire Investigator test.

0101	Noah Ryder	Seats (Total: 20)
	M 5:30pm - 8:00pm	JMP 1109

ENFP489 **Special Topics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance to fire protection.

For ENFP majors only.

Contact department for information to register for this course.

ENFP489W **Special Topics; Wildland Fires: Science and Application**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance to fire protection.

0101	Michael Gollner	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	CSI 3117

ENFP619 **Graduate Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

0101	Arnaud Trouve	Seats (Total: 10)
	Contact instructor or department for details.	
	Contact instructor or department for details.	

ENFP627 **Smoke Detection and Management**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENFP300. Also offered as: ENFP440. Credit only granted for: ENFP627 or ENFP440.

Analysis of hazard smoke. Response analysis of smoke detectors based on characteristics of detectors and properties of smoke. Performance characteristics and limitations of smoke management systems. Capabilities and limitations of analytical design aids.

Also offered as ENFP489M. Credit only granted for ENFP489M or ENFP627.

0101	Kenneth Isman	Seats (Total: 11)
	TuTh 11:00am - 12:15pm	PHY 4221

ENFP629 **Selected Topics**

(Perm req)

Credits: 3-6 Grading Method: Regular, Audit

Current research, studies in fire protection engineering. Future trends and significant changes in research, professional areas. The professional standards process.

Contact department for information to register for this course.

ENFP629M **Selected Topics; Material Flammability**

Credits: 3-6 Grading Method: Regular, Audit

Current research, studies in fire protection engineering. Future trends and significant changes in research, professional areas. The professional standards process.

0101	Stanislav Stoliarov	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	CSI 2118

ENFP629W **Selected Topics; Wildland Fires: Science and Application**

Credits: 3-6 Grading Method: Regular, Audit

Current research, studies in fire protection engineering. Future trends and significant changes in research, professional areas. The professional standards process.

0101	Michael Gollner	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	CSI 3117

ENFP649 **Special Problems**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the current literature to suit the special needs and background of students, or for individual students who have definite plans of individual study.

Prerequisite: permission of department.

Contact department for information to register for this course.

ENFP653 **Advanced Fire Supression**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-Fire Protection Engineering department. Credit only granted for: ENFP410, ENFP489L, ENFP653, or ENFP629C. Formerly: ENFP629C.

Issues related to the suppression of fires and the design of fire suppression systems. Theoretical aspects of fire suppression and extinction are considered to provide the foundation for the practical design of different types of fire suppression systems. Focus on water-based and "clean agent" fire suppression systems, with emphasis on high challenge and special hazard applications. Systems using other agents are introduced, but are not addressed in detail.

0101	Kenneth Isman	Seats (Total: 10)
	TuTh 9:30am - 10:45am	KEB 1200

ENFP655 **Smoke Control**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-CDL-Office of Advanced Engineering Education.

Introduces the student to smoke control needs, design approaches and analytical methods. Students should develop an understanding of the performance characteristics and limitations of smoke control systems and the capabilities and limitations of analytical design aids. This course gives students an opportunity to integrate a broad range of information from previous courses with material from this course, such as fluid mechanics, heat transfer, and fire dynamics, and fire modeling. Students will review data from past experimental programs and apply computer model(s).

EF01	Christine Pongratz, James Milke	Seats (Total: 40)
	Meets March 11, 2019 - May 31, 2019	
	Class time/details on ELMs	ONLINE

ENFP663 **Advanced Fire Risk Modeling**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENFP629R or ENFP663. Formerly: ENFP629R.

This on-line course addresses the fundamentals of fire risk modeling from both theoretical and applied perspectives.

EF01	James Milke, Francisco Joglar	Seats (Total: 40)
	Meets March 11, 2019 - May 31, 2019	
	Class time/details on ELMs	ONLINE

ENFP665 **Advanced Fire and Explosion Investigations**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-A. James Clark School of Engineering. Also offered as: ENFP465. Credit only granted for: ENFP629N, ENFP489N OR ENFP465. Formerly: ENFP629N. Additional information: The course will be taught as a dual senior-level undergraduate course and graduate course.

Presents an overview of fire and explosion investigation and reconstruction. Information on field techniques, applicable standards and best practices will be presented along with how fire science and fire dynamics can be applied to forensic analysis. Additionally laboratory work will be conducted to illustrate the application of fire dynamics to forensic scenes to assist in the determination of cause and evaluation of potential fire growth scenarios. Sample experiments include 2nd item ignition tests, ignition delay tests, and the course culminates with a series of 1:12 reduced scale house burns to allow the students to investigate and document a fire. This course also qualifies the student to sit for the NAFI Certified Fire Investigator test.

0101	Noah Ryder M 5:15pm - 7:45pm	Seats (Total: 10) JMP 1109

ENFP799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Development and completion of Master's Thesis.

Contact department for information to register for this course.

ENGL English Spring 2019

FOR MORE DETAILED DESCRIPTIONS OF THE COURSES OFFERED, CLICK HERE TO VISIT THE ENGLISH DEPARTMENT WEBSITE English as a second language classes are listed under UMEI.

ENGL101 **Academic Writing**

Credits: 3 Grading Method: Regular General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

Students with a TSWE score of 33 or below must take ENGL 101A in place of ENGL 101. Students for whom English is a second language should consider taking ENGL 101X in place of ENGL 101.

0001	Matthew Cascio MWF 8:00am - 8:50am	Seats (Total: 19) TWS 0201
0002	Scott Eklund, Kimberly Banks MWF 8:00am - 8:50am	Seats (Total: 19) KNI 1103
0101	Robert Lucci MWF 9:00am - 9:50am	Seats (Total: 19) TWS 0221
0102	Derek Ellis MWF 9:00am - 9:50am	Seats (Total: 19) TWS 0214
0103	Cheryl Spinner MWF 9:00am - 9:50am	Seats (Total: 19) TWS 1106

0104	Scott Eklund, Kimberly Banks MWF 9:00am - 9:50am	Seats (Total: 19) TWS 0236
0105	William Pittman MWF 9:00am - 9:50am	Seats (Total: 19) TWS 0205
0106	Sarah Humud MWF 9:00am - 9:50am	Seats (Total: 19) KEY 0120
0201	Nicole Cuffy MWF 10:00am - 10:50am	Seats (Total: 19) TWS 1320
0203	Derek Ellis MWF 10:00am - 10:50am	Seats (Total: 19) TWS 0205
0204	Tonianne Bellomo MWF 10:00am - 10:50am	Seats (Total: 19) SQH 1123
0206	Kristine Morrissey MWF 10:00am - 10:50am	Seats (Total: 19) KEY 0125
0207	Rakia Khalid MWF 10:00am - 10:50am	Seats (Total: 19) ASY 3221
0301	Virginia Butler MWF 11:00am - 11:50am	Seats (Total: 19) ASY 3217
0302	Steve Beaulieu MWF 11:00am - 11:50am	Seats (Total: 19) KEY 0120
0303	Nia Crawford MWF 11:00am - 11:50am	Seats (Total: 19) KEY 0119
0304	William Pittman MWF 11:00am - 11:50am	Seats (Total: 19) KEY 0121
0305	Nicolette Polek MWF 11:00am - 11:50am	Seats (Total: 19) SQH 1123
0308	Benjamin Baker MWF 11:00am - 11:50am	Seats (Total: 19) TWS 1313

0309	Thibault Raoult MWF 11:00am - 11:50am	Seats (Total: 19) ATL 2316
0401	Grace Kwon MWF 12:00pm - 12:50pm	Seats (Total: 19) KEY 0123
0402	Brandy Williams MWF 12:00pm - 12:50pm	Seats (Total: 19) EDU 3236
0403	Nia Crawford MWF 12:00pm - 12:50pm	Seats (Total: 19) KEY 0102
0404	John Pugh MWF 12:00pm - 12:50pm	Seats (Total: 19) ASY 3217
0405	Lara Payne MWF 12:00pm - 12:50pm	Seats (Total: 19) EDU 3233
0406	Michael Colson MWF 12:00pm - 12:50pm	Seats (Total: 19) KEY 0121
0407	Rakia Khalid MWF 12:00pm - 12:50pm	Seats (Total: 19) KNI 1105
0408	Anna Goodson MWF 12:00pm - 12:50pm	Seats (Total: 19) TWS 1313
0501	Anna Goodson MWF 1:00pm - 1:50pm	Seats (Total: 19) ASY 3217
0502	Nia Crawford MWF 1:00pm - 1:50pm	Seats (Total: 19) KEY 0123
0503	Virginia Butler MWF 1:00pm - 1:50pm	Seats (Total: 19) JMZ 3203
0504	William Pittman MWF 1:00pm - 1:50pm	Seats (Total: 19) KEY 0102
0507	Benjamin Baker MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 0201

0508	Thibault Raoult MWF 1:00pm - 1:50pm	Seats (Total: 19) KEY 0124
0509	Kristine Morrissey MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 1320
0510	Nicole Cuffy MWF 1:00pm - 1:50pm	Seats (Total: 19) KNI 1103
0511	Nicolette Polek MWF 1:00pm - 1:50pm	Seats (Total: 19) KNI 1105
0601	Nia Crawford MWF 2:00pm - 2:50pm	Seats (Total: 19) KEY 0102
0602	Cheryl Spinner MWF 2:00pm - 2:50pm	Seats (Total: 19) TWS 0221
0603	Lara Payne MWF 2:00pm - 2:50pm	Seats (Total: 19) JMZ 0208
0604	Daniel Quimby MWF 2:00pm - 2:50pm	Seats (Total: 19) JMZ 1120
0605	Courtney Coppage, Robert Lucci MWF 2:00pm - 2:50pm	Seats (Total: 19) JMZ 0103
0701	D'Arcee Neal MW 5:00pm - 6:15pm	Seats (Total: 19) TWS 1313
0702	Erica Cochran MW 6:30pm - 7:45pm	Seats (Total: 19) TWS 1313
1001	Kelsey Kerr TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 0205
1002	Kiyanna Hill TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 0236
1003	Juliane Kim TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 1313

1101	Kelsey Kerr TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 1321
1102	Timothy Bruno TuTh 9:30am - 10:45am	Seats (Total: 19) ASY 3221
1104	Emilee Durand TuTh 9:30am - 10:45am	Seats (Total: 19) KEY 0123
1106	Sabrina Islam TuTh 9:30am - 10:45am	Seats (Total: 19) KEY 0102
1107	Jeffrey Griswold MWF 11:00am - 11:50am	Seats (Total: 19) KEY 0125
1108	Joshua Weiss TuTh 9:30am - 10:45am	Seats (Total: 19) JMZ 1124
1109	Kappa Danielson TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 1105
1201	Joshua Weiss TuTh 11:00am - 12:15pm	Seats (Total: 19) HBK 0108
1202	Jesse Brooks TuTh 11:00am - 12:15pm	Seats (Total: 19) ATL 0201
1203	Kelly Singleton TuTh 11:00am - 12:15pm	Seats (Total: 19) ASY 3221
1204	Kiyanna Hill TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 1107
1205	Susan Pramschufer TuTh 11:00am - 12:15pm	Seats (Total: 19) HBK 0123
1206	Sabrina Islam TuTh 11:00am - 12:15pm	Seats (Total: 19) KNI 1103
1208	Uchechi Okereke-Beshel TuTh 11:00am - 12:15pm	Seats (Total: 19) KEY 0125

1301	Radford Skudrna TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 1321
1302	Stephanie Allen TuTh 12:30pm - 1:45pm	Seats (Total: 19) KEY 0121
1303	Nancy Vera TuTh 12:30pm - 1:45pm	Seats (Total: 19) KEY 0125
1304	Kelly Singleton TuTh 12:30pm - 1:45pm	Seats (Total: 19) ASY 3221
1305	Sabrina Islam TuTh 12:30pm - 1:45pm	Seats (Total: 19) JMZ 2123
1306	Justin Lohr TuTh 12:30pm - 1:45pm	Seats (Total: 19) JMZ 0122
1308	Daniel Kason TuTh 12:30pm - 1:45pm	Seats (Total: 19) JMZ 0125
1401	Stephanie Allen TuTh 2:00pm - 3:15pm	Seats (Total: 19) KEY 0124
1402	Samantha O'Connor TuTh 2:00pm - 3:15pm	Seats (Total: 19) SKN 1112
1403	Jesse Brooks TuTh 2:00pm - 3:15pm	Seats (Total: 19) ATL 2316
1404	Nicole Cuffy TuTh 2:00pm - 3:15pm	Seats (Total: 19) JMZ 2123
1405	Sabrina Islam TuTh 2:00pm - 3:15pm	Seats (Total: 19) JMZ 0125
1406	Joshua Weiss TuTh 2:00pm - 3:15pm	Seats (Total: 19) HBK 1108
1601	Brian Davis TuTh 5:00pm - 6:15pm	Seats (Total: 19) TWS 0236

1701	Brian Davis TuTh 6:30pm - 7:45pm	Seats (Total: 19) TWS 0205
9001	John Kim Tu 9:30am - 10:45am Th 9:30am - 10:45am	Seats (Total: 19) KEY 0120 ONLINE
9002	John Kim Tu 11:00am - 12:15pm Th 11:00am - 12:15pm	Seats (Total: 19) KEY 0120 ONLINE
9003	John Macintosh Th 9:30am - 10:45am Tu 9:30am - 10:45am	Seats (Total: 19) KEY 0120 ONLINE
9004	Rachel Waugh Th 11:00am - 12:15pm Tu 11:00am - 12:15pm	Seats (Total: 19) KEY 0120 ONLINE
9005	David Brookshire MF 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 19) KEY 0120 ONLINE
9006	David Brookshire MF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 19) KEY 0120 ONLINE
9007	Amanda Allen Tu 9:30am - 10:45am Th 9:30am - 10:45am	Seats (Total: 19) KEY 0119 ONLINE
9008	Amanda Allen Tu 11:00am - 12:15pm Th 11:00am - 12:15pm	Seats (Total: 19) KEY 0119 ONLINE
9009	Amanda Allen Tu 12:30pm - 1:45pm Th 12:30pm - 1:45pm	Seats (Total: 19) KEY 0120 ONLINE

9010	Amanda Allen Tu 2:00pm - 3:15pm Th 2:00pm - 3:15pm	Seats (Total: 19) KEY 0120 ONLINE
9011	Emily Lyons MW 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 19) TWS 0201 ONLINE
9012	Emily Lyons MW 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 19) TWS 0201 ONLINE
9013	Robert Lucci MW 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 19) TWS 0201 ONLINE
9014	Robert Lucci MW 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 19) KEY 0121 ONLINE
9015	Rachel Waugh Th 9:30am - 10:45am Tu 9:30am - 10:45am	Seats (Total: 19) KEY 0119 ONLINE
9016	Tricia Raysor Th 11:00am - 12:15pm Tu 11:00am - 12:15pm	Seats (Total: 19) KEY 0119 ONLINE
9017	Tricia Raysor Th 12:30pm - 1:45pm Tu 12:30pm - 1:45pm	Seats (Total: 19) KEY 0120 ONLINE
9018	Tricia Raysor Th 2:00pm - 3:15pm Tu 2:00pm - 3:15pm	Seats (Total: 19) KEY 0120 ONLINE
9019	David Brookshire MF 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 19) KEY 0123 ONLINE

9020	David Brookshire MF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 19) KEY 0123 ONLINE
9021	Susan Pramschufer Tu 12:30pm - 1:45pm Th 12:30pm - 1:45pm	Seats (Total: 19) KEY 0102 ONLINE
9022	John Macintosh Th 12:30pm - 1:45pm Tu 12:30pm - 1:45pm	Seats (Total: 19) KEY 0102 ONLINE

ENGL101H **Academic Writing**

Credits: 3 Grading Method: Regular General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

0408	Peter Grybauskas MWF 12:00pm - 12:50pm	Seats (Total: 19) JMZ 1122
0507	Timothy Bruno TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 0214

ENGL101S **Academic Writing**

Credits: 3 Grading Method: Regular General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

Restricted to College Park Scholars.

0109	Susanna Underland MWF 9:00am - 9:50am	Seats (Total: 19) CCC 1105

0209	Joshua Weiss MWF 10:00am - 10:50am	Seats (Total: 19) CCC 1105
0309	Maggie Gill MWF 11:00am - 11:50am	Seats (Total: 19) CCC 1105
0609	Michael Colson MWF 2:00pm - 2:50pm	Seats (Total: 19) CCC 1105
1109	Jesse Brooks TuTh 9:30am - 10:45am	Seats (Total: 19) CCC 1115
1209	Katherine Joshi TuTh 11:00am - 12:15pm	Seats (Total: 19) CCC 1105
1309	Katherine Joshi TuTh 12:30pm - 1:45pm	Seats (Total: 19) CCC 1115
1409	Katherine Joshi TuTh 2:00pm - 3:15pm	Seats (Total: 19) CCC 1105
9001	Catherine Bayly MF 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 19) CCC 1105 ONLINE
9002	Catherine Bayly MF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 19) CCC 1105 ONLINE

ENGL101X **Academic Writing**

Credits: 3 Grading Method: Regular General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

Limited to students for whom English is a second language. To register for ENGL 101X, a student must first demonstrate competence in English. Proof of one of the following should be brought to advisors: 1) a minimu m score of 100 on the iBT 2) a minimum score of 7 on the IELTS or 3) successful completion of UMEI 005, Advanced English as a Foreign Language, Semi-Intensive.

2003	Laura Williams TuTh 11:00am - 12:15pm	Seats (Total: 18) JMZ 2207	
2004	Benjamin Baker MWF 10:00am - 10:50am	Seats (Total: 18) JMZ 0122	
2005	Benjamin Baker MWF 12:00pm - 12:50pm	Seats (Total: 18) TWS 1320	
2006	Nathan Tillman TuTh 2:00pm - 3:15pm	Seats (Total: 18) PLS 1176	

ENGL120 **Acting Human: Shakespeare and the Drama of Identity**

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

Credit only granted for: ENGL120 or ENGL289I. Formerly: ENGL289I.

Shakespeare's ideas of dramatic realism studied through close examination of literary and dramatic techniques. How Shakespeare generates the fiction of a living, thinking person in the space of five acts, and how readers participate in the making of that fiction. Some attention to Shakespeare on film and what the playwright can teach us about different media.

0101	Gerard Passannante MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 24) TWS 1100 TWS 0214	Discussion
0102	Gerard Passannante MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 24) TWS 1100 TWS 1107	Discussion
0103	Gerard Passannante MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	Seats (Total: 24) TWS 1100 TWS 0214	Discussion
0104	Gerard Passannante MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 24) TWS 1100 TWS 0214	Discussion

ENGL125 **Why Poetry Matters**

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

Credit only granted for: ENGL125 or ENGL289P. Formerly: ENGL289P.

Introduction to the formal fundamentals of poetry and exploration of the role poetry plays in how we think about the human condition; what constitutes knowledge and wisdom, interior subjectivity and communal identity; and how this knowledge is to be used in confronting new challenges and the perennial questions: how to live with oneself, and as oneself; in time, and with others; here, where we reside; and elsewhere, where we imagine ourselves going.

0101	Michael Collier MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 22) JMZ 0220 TWS 0201	Discussion
0102	Michael Collier MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 22) JMZ 0220 TWS 0201	Discussion
0103	Michael Collier MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 22) JMZ 0220 TWS 0205	Discussion
0104	Michael Collier MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 22) JMZ 0220 TWS 0201	Discussion
0105	Michael Collier MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 22) JMZ 0220 TWS 3132	Discussion
0106	Michael Collier MW 12:00pm - 12:50pm F 2:00pm - 2:50pm	Seats (Total: 22) JMZ 0220 TWS 0201	Discussion

ENGL130 Race and the Cultural Politics of Blood: A Historical Perspective

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

Credit only granted for: ENGL130 or ENGL237. Formerly: ENGL237.

Exploration of race, as term and concept, at three different historical times and from three different perspectives, through the reading of three stories: William Shakespeare's drama Othello, Aphra Behn's novella Oroonoko, and the short story Benito Cereno by Herman Melville. Exploration of the importance of context in interpretation. Study of how a concept for rationalizing human difference appears and adapts, fuses and fades away, relocates and is repurposed. How understanding of the particular situation of the concept, its context, changes our reading of the story.

0101	Kim Coles MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 24) TWS 1100 TWS 0221	 Discussion
0102	Kim Coles MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 24) TWS 1100 TWS 0205	 Discussion

ENGL142 **Literary Maryland**

Credits: 3 Grading Method: Regular General Education: DSHU, DVUP, SCIS

Credit only granted for: ENGL142 or ENGL289M. Formerly: ENGL289M.

What does the literature of Maryland teach us about our state's past, present, and future? "Literary Maryland" explores this question by taking students on a tour of our state's prose, poetry, and drama from colonization to the present. In addition to reading fascinating writing and visiting interesting places, you'll learn how the Chesapeake was formed; why nobody sings the entire national anthem; and what led Baltimore to name its football team after a poem written by a Virginian.

0101	Randy Ontiveros MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 19) ESJ 1215 TWS 1106	 Discussion
0102	Randy Ontiveros MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 19) ESJ 1215 TWS 1106	 Discussion
0103	Randy Ontiveros MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 19) ESJ 1215 TWS 1106	 Discussion
0104	Randy Ontiveros MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 18) ESJ 1215 TWS 1106	 Discussion

ENGL202 **Inventing Western Literature: Renaissance to Modern**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL	General Education: DSHU

Wide range of texts from the Renaissance to the 21st century. Themes and literary techniques in the evolution of Western literature. Print publication, industrialization, questioning of religious, political, intellectual, and cultural authority.

0101	Garth Libhart	Seats (Total: 30)
	MWF 11:00am - 11:50am	TWS 0214

ENGL212 **English Literature: 1800 to the Present**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL	General Education: DSHU

Surveys the major literary movements of the period, from Romantic to Victorian to Modern. Such authors as Wordsworth, Keats, Bronte, Tennyson, Browning, Yeats, Joyce, Woolf.

0101	Fatima Taha	Seats (Total: 30)
	MWF 10:00am - 10:50am	HBK 0123

ENGL222 **American Literature: 1865 to Present**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL	General Education: DSHU

Surveys American writing from the Civil War through the Cold War. Authors such as Clemens, Frost, Hurston, Bellow.

0101	Hillary Roegelein	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	KEY 0102

ENGL234 **African-American Literature and Culture**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL, D	General Education: DSHU, DVUP

An exploration of the stories black authors tell about themselves, their communities, and the nation as informed by time and place, gender, sexuality, and class. African American perspective themes such as art, childhood, sexuality, marriage, alienation and mortality, as well as representations of slavery, Reconstruction, racial violence and the Nadir, legalized racism and segregation, black patriotism and black ex-patriots, the optimism of integration, and the prospects of a post-racial America.

Also offered as AASP298L. Credit granted for AASP298L or ENGL234.

0101	Dominique Young TuTh 12:30pm - 1:45pm	Seats (Total: 30) TWS 0214
0102	Steve Beaulieu MWF 10:00am - 10:50am	Seats (Total: 30) KEY 0102

ENGL235 **U.S. Latinx Literature and Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail | CORE: HL, D | General Education: DSHU, DVUP

Examines the poetry, prose, and theater of Latinx communities in the United States from their origins in the Spanish colonization of North America to their ongoing development in the 21st century. Considers how authors use literary form to gain insight into human experience, including mortality, religious belief, gender and sexuality, war and peace, family, language use, scientific inquiry, cultural tradition, ecology, and labor. Also studies how Latinx literary traditions have shaped and been shaped by broader currents in American literature, as well as what connections exist between Latinx literature and social and artistic developments in other parts of the world, particularly Latin America and the Caribbean. Authors may include Alvar Nunez Cabeza de Vaca, Eulalia Perez, Juan Nepomuceno Seguin, Maria Amparo Ruiz de Burton, Jose Marti, Arthur A. Schomburg, Jesus Colon, Julia de Burgos, Cesar Chavez, Ariel Dorfman, Gloria Anzaldua, Junot Diaz, and Cristina Garcia.

Also offered as AMST298Q. Credit granted for ENGL235 or AMST298Q.

0101	Kerishma Panigrahi MWF 1:00pm - 1:50pm	Seats (Total: 30) TWS 0205

ENGL241 **What the Novel Does**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL | General Education: DSHU

An exploration of what the novel does that cannot be done by film, by television, by cell-phone screens, by any stream of images, or by textual excerpts pulled up for a quick read. The different ways of the novel, with particular focus on the process of thinking and the developed consciousness. The novel as a machine to think with and an irreplaceable model of complex human thought. Study of how thought is presented in radically different ways in novels that cross lines of class, gender, chronology, and nationality.

0101	Justin Thompson TuTh 5:00pm - 6:15pm	Seats (Total: 30) TWS 0205

ENGL243 **What is Poetry?**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL | General Education: DSHU

An exploration of arguably the most complex, profound, and ubiquitous expression of human experience. Study through close reading of significant forms and conventions of Western poetic tradition. Poetry's roots in oral and folk traditions and connections to popular song forms.

0401	Konstantinos Pozoukidis TuTh 3:30pm - 4:45pm	Seats (Total: 30) TWS 0214	

ENGL244 The Play's the Thing

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL | General Education: DSHU

Exploration of drama through a consideration of plot, narrative flow, analytical flow, staging, performance, manuscript and printing history, text and textual change over time, and interpretation. Plays will be approached as public attempts to understand what it means to be alive.

Contact department for information to register for this course.

ENGL245 Film Form and Culture

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA | General Education: DSHU

Also offered as: FILM245. Credit only granted for: ENGL245 or FILM245.

Introduction to film as art form and how films create meaning. Basic film terminology; fundamental principles of film form, film narrative, and film history. Examination of film technique and style over past one hundred years. Social and economic functions of film within broader institutional, economic, and cultural contexts.

Restriction: Must not have completed ENGL245 or FILM245. Also offered as: ENGL245. Credit only granted for: CMLT214, CMLT245 or FILM 245. Formerly: CMLT214."

0201	Paul Cote TuTh 2:00pm - 3:15pm Tu 3:30pm - 6:00pm	Seats (Total: 30) TWS 0320 TWS 0320	 Lab
0301	Paul Cote TuTh 11:00am - 12:15pm Tu 3:30pm - 6:00pm	Seats (Total: 30) TWS 0320 TWS 0320	 Lab

ENGL250 Reading Women Writing

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL, D	General Education: DSHU, DVUP

Also offered as: WMST255. Credit only granted for: ENGL250 or WMST255.

Explores literary and cultural expressions by women and their receptions within a range of historical periods and genres. Topics such as what does a woman need in order to write, what role does gender play in the production, consumption, and interpretation of texts, and to what extent do women comprise a distinct literary subculture. Interpretation of texts will be guided by feminist and gender theory, ways of reading that have emerged as important to literary studies over the last four decades.

0201	Manon Soulet	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	KEY 0102

ENGL255 Literature of Science and Technology

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL	General Education: DSHU

Credit only granted for: ENGL255 or ENGL278T. Formerly: ENGL278T.

Examines science and technology through the lens of British and America literature, primarily between 1800 and the present. Readings from early natural and experimental philosophers of the Scientific Revolution and Enlightenment. How literary works represent the ethics of science and technology; beneficial developments of science, and also heavy toll of industrialization. Writers studied may include Francis Bacon, Mary Shelley, Charles Darwin, H.G. Wells, Albert Einstein, Aldous Huxley, Richard Feynman, Philip K. Dick, Octavia Butler, Michael Frayn, and Tom Stoppard.

0201	William Gonch	Seats (Total: 30)
	MWF 12:00pm - 12:50pm	KEY 0125

ENGL256 Fantasy Literature

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSHU

How fantasy employs alternate forms of representation, such as the fantastical, estranging, or impossible, which other genres would not allow. Through novels, short stories, graphic novels, and film, traces fantasy's roots in mythology and folklore, then explores how modern texts build upon or challenge these origins. Examination of literary strategies texts use to represent the world through speculative modes. How to distinguish fantasy from, and relate it to, other genres such as science fiction, horror, fairly tales, and magical realism. Fantasy's investment in world-building, history, tradition, and categories of identity such as race, class, and gender. How fantasy, as a genre, form, and world-view, is well-suited to our contemporary reality.

0101	Emilee Durand	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TWS 0221

ENGL262 **Introduction to the Hebrew Bible/Old Testament**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL | General Education: DSHU

Also offered as: JWST262. Credit only granted for: JWST262, HEBR223, or ENGL262. Formerly: HEBR223.

An exploration of the origins and compositional history of biblical literature. Critical study of texts and socio-historical analysis of their background.

0101	Maxine Grossman MW 2:00pm - 3:15pm	Seats (Total: 40) SQH 1101

ENGL265 **Lesbian, Gay, Bisexual, and Transgender Literatures**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU, DVUP

Restriction: Must not have completed LGBT265. Also offered as: LGBT265. Credit only granted for: ENGL265 or LGBT265.

A study of literary and cultural expressions of queer and trans identities, positionalities, and analytics through an exploration of literature, art, and media. We will examine historical and political power relations by considering the intersections of sexuality and gender with race, class, nation, and disability. Topics include the social construction and regulation of sexuality and gender, performance and performativity, intersectionality, and the relationship between aesthetic forms and queer/ trans subjectivity. Our interpretations will be informed by queer and trans theories.

0101	Aqdas Aftab TuTh 12:30pm - 1:45pm	Seats (Total: 30) TLF 1103
0201	John Macintosh MWF 1:00pm - 1:50pm	Seats (Total: 30) TWS 0236

ENGL269B **Special Topics in Study Abroad II; Writing Workshop I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL269C **Special Topics in Study Abroad II; Writing Workshop II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL269J **Special Topics in Study Abroad II; Introduction to Creative Writing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL269R **Special Topics in Study Abroad II; Writing Rome**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL269X **Special Topics in Study Abroad II; Theories of Text**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL271 **Writing Poems and Stories: An Introductory Workshop**

Credits: 3 Grading Method: Regular, Pass-Fail General Education: DSSP

Introduction to theory and practice of writing fiction and poetry. Emphasis on critical reading of literary models. Exercises and workshop discussions with continual reference to modeling, drafting, and revising as necessary stages in a creative process.

0101	Hannah Beilenson TuTh 11:00am - 12:15pm	Seats (Total: 15) KEY 0121
0102	Hannah Beilenson TuTh 11:00am - 12:15pm *Restricted to students in the Jiminez-Porter Writers' House.*	Seats (Total: 5) KEY 0121

0201	Alannah Hensley TuTh 2:00pm - 3:15pm	Seats (Total: 20) KEY 0123
0301	Jehane Sharah MW 2:00pm - 3:15pm	Seats (Total: 20) KEY 0125
0401	Shonte Murray-Daniels MWF 10:00am - 10:50am	Seats (Total: 20) CHE 2145

ENGL272 **Writing Fiction: A Beginning Workshop**

Credits: 3 Grading Method: Regular, Pass-Fail General Education: DSSP

Introduction to theory and practice of writing fiction. Emphasis on critical reading of literary models. Exercises and workshop discussions with continual reference to modeling, drafting, and revising as necessary stages in a creative process.

0101	Megan Howell TuTh 11:00am - 12:15pm	Seats (Total: 20) KEY 0123
0201	Maiasia Grimes TuTh 9:30am - 10:45am	Seats (Total: 20) KEY 0121
0301	Kathleen Buckley MW 2:00pm - 3:15pm	Seats (Total: 20) TWS 1320
0401	Elizabeth Nonemaker TuTh 12:30pm - 1:45pm	Seats (Total: 20) KEY 0123

ENGL273 **Writing Poetry: A Beginning Workshop**

Credits: 3 Grading Method: Regular, Pass-Fail General Education: DSSP

Introduction to theory and practice of writing poetry. Emphasis on critical reading of literary models. Exercises and workshop discussions with continual reference to modeling, drafting, and revising as necessary stages in a creative process.

0101	Hunter Parsons TuTh 2:00pm - 3:15pm	Seats (Total: 20) KEY 0125

0201	Max Lasky	Seats (Total: 20)
	MWF 11:00am - 11:50am	KEY 0102

ENGL274 **Creative Writing Through The Eyes of African Americans: A Beginning Workshop**

Credits: 3 | Grading Method: Regular, Pass-Fail | General Education: DSSP

Restriction: Must not have completed ENGL271, ENGL274, ENGL294,or AASP274. Also offered as: AASP274. Credit only granted for: ENGL274 or AASP274.

Introduction to theory and practice of writing fiction, drama and poetry, with an emphasis on African American literary models. Critical reading, exercises and workshop discussions with continual reference to modeling, drafting, and revising as necessary stages in a creative process.

Also offered as AASP298W. Credit granted for ENGL274 or AASP298W.

0101	Dorothy Phaire	Seats (Total: 20)
	TuTh 9:30am - 10:45am	NCC 0120

ENGL275 **Scriptwriting for Theater, Film, and Television**

Credits: 3 | Grading Method: Regular, Pass-Fail | General Education: DSHU, DSSP

Also offered as: ARHU275. Credit only granted for: ENGL278D, ENGL275, ARHU319B, or ARHU275. Formerly: ENGL278D; ARHU319B.

Introduction to the theory and practice of scriptwriting with an opportunity to read, view, evaluate, write, and revise texts meant to be performed. Students will practice writing for the stage, film, and television and also examine selected scripts, performances, and film and television clips as models for their own creative work. Students will complete frequent writing exercises, participate in workshops, and learn to apply scholarship to the analysis and critique of scripts.

0101	Liam Daley	Seats (Total: 15)
	MWF 10:00am - 10:50am	KEY 0120
0102	Liam Daley	Seats (Total: 5)
	MWF 10:00am - 10:50am	KEY 0120
	This section is restricted to students in the Jimenez-Porter Writers' House.	

ENGL280 **The English Language**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU

Introduction to the structure of English and its historical development with a focus on techniques of linguistic analysis. Major topics include the sound systems of English and its patterns of word formation and sentence structure, and the ways these have changed over time and vary around the world.

0101	Paul Cote	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TWS 0205

ENGL281 **Standard English Grammar, Usage, and Diction**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Study of the structures and patterns of English grammar. The focus is on the standard dialect and contemporary usage, but we will also explore variation over time and across dialects. Includes word formation, sentence elements and structures, and conventions of punctuation, as well as the social aspects of grammatical choices.

0101	Roberto Leon	Seats (Total: 30)
	MWF 9:00am - 9:50am	JMZ 0208

ENGL290 **Introduction to Digital Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU, DSSP

Introductory course in digital studies. Surveys contemporary humanities work in digital technologies, including the web and social media and their historical antecedents. Explores design and making as analytical tools alongside reading and writing. Situates digital media within power and politics and develops critical awareness of how media shape society and ethics. Interdisciplinary approaches to creativity, analysis, and technology. While the course will include hands-on practice, no prior experience of programming, designing, or making required other than a willingness to experiment and play.

0101	Jeffrey Moro	Seats (Total: 20)
	MWF 12:00pm - 12:50pm	HBK 1112

ENGL291 **Writing, Revising, Persuading**

Credits: 3 Grading Method: Regular General Education: DSHU, DSSP

Prerequisite: Must have satisfied Fundamental Studies Academic Writing requirement.

Intermediate-level, writing-intensive course for students who have successfully satisfied the Fundamental Studies Academic Writing requirement but wish to hone skills in analyzing and producing rhetorically attuned, well-styled prose. Deeper study of rhetorical theory and its application to a wide variety of arguments and situations. Additional writing practice, techniques of revision, study of effect of stylistic choices. Topics may include argumentation theory, visual rhetoric, stylistic theory, and writing theory.

Contact department for information to register for this course.

ENGL292 **Writing for Change**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP, DVUP

Prerequisite: Permission of ARHU-English department. Recommended: ENGL101. Restriction: Requires application and references.

Service learning in collaboration with students at area high schools. Explores how writing can be a tool for social change. Participants serve as mentors, create a performance event concerning a pressing social issue, and compose reflections, literacy narratives, publicity materials, and a multimodal project. Focus on developing critical self-awareness.

Also offered as ENGL388C. Credit granted ENGL292 or ENGL388C.

0101	Justin Lohr	Seats (Total: 18)	
	TuTh 3:30pm - 4:45pm	TWS 0207	
	Tu 2:00pm - 3:15pm	TWS 3252	Lab

ENGL293 **Writing in the Wireless World**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU, DSSP

Recommended: ENGL101. Credit only granted for: ENGL278Z or ENGL293. Formerly: ENGL278Z.

A hands-on exploration of writing at the intersection of technology and rhetoric. Students will learn to read, analyze, and compose the kind of multimodal documents (combining text, image, and sound) that constitute communication in our digital world.

0101	Daniel Kason	Seats (Total: 22)
	TuTh 2:00pm - 3:15pm	JMZ 0120

ENGL294 **Persuasion and Cleverness in Social Media**

Credits: 3 | Grading Method: Regular | General Education: DSHU, DSSP

Prerequisite: Must have satisfied Fundamental Studies Academic Writing requirement.

Exploration of various persuasive media encountered in daily life through the lens of rhetorical and critical theories. Principles of rhetoric and analysis of how persuasion functions across media. Invention of effective multimedia works appropriate to purpose, audience, and context. Concepts from cultural studies used to develop critical awareness about power and ideology and how they influence the way people produce and understand messages. By integration of technology, rhetoric, and cultural studies, students become more critically-rhetorically informed thinkers, authors, and audiences of arguments and culture in the digital age. Writing intensive course. No prior multimedia experience is expected.

0101	Alysia Sawchyn TuTh 3:30pm - 4:45pm	Seats (Total: 20) TWS 0224

ENGL297 **Introduction to Professional Writing**

Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: ENGL101.

Introduction to the rhetorical principles and professional practices of professional writing, particularly the research, writing, communication, analytical, and technological skills needed for the Professional Writing minor. How culture and technology relate to the work of professional writing; design principles and rhetorical moves; digital tools, research skills, and writing strategies of professional writers. Develops skills needed to publish a writing portfolio that showcases students' professional writing competencies and projects your professional writer identities.

0101	Joshua Buursma MW 2:00pm - 3:15pm	Seats (Total: 22) TWS 0224
0201	Joseph Good TuTh 2:00pm - 3:15pm	Seats (Total: 22) TWS 0232

ENGL301 **This is English: Fields and Methods**

Credits: 3 Grading Method: Regular

Restriction: Must be in English Language and Literature program; or must be in Secondary Educ: English Language Arts program.

"English" means a lot of things. Are you looking for literature, or linguistics? For writing--creative, critical, or professional? For theater, or debate? For film, or even videogames? This gateway course for the English major introduces you to all of these areas and more, as well as to our discipline's unique resources for studying and enjoying them. The English discipline includes three main interpretive fields: Literary and Cultural Studies; Language, Writing, and Rhetoric; and Media Studies. This course brings together the fundamental concepts and methods for reading, viewing, and researching practiced in these fields, launching you into English studies and and helping you to choose the major track that is right for you.

0201	Theresa Coletti MWF 12:00pm - 12:50pm	Seats (Total: 20) TWS 3132
0401	Blake Wilder TuTh 11:00am - 12:15pm	Seats (Total: 20) TWS 3132
0501	Blake Wilder TuTh 12:30pm - 1:45pm	Seats (Total: 20) TWS 3132
0801	Sharada Balachandran Orihuela MW 2:00pm - 3:15pm	Seats (Total: 20) TWS 3132

ENGL302 **Medieval Literature in Translation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Surveys major works of English and continental Middle Ages. Readings may include romance, lyric and drama, Germanic epic, works of Dante, Chretien de Troyes, Jean de Meun, Christine de Pisan, Malory, English and continental mystics.

0101	Thomas Moser MWF 11:00am - 11:50am	Seats (Total: 27) TWS 0236

ENGL304 **The Major Works of Shakespeare**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Restriction: Must not have completed ENGL403 or ENGL404.

Representative early, middle, and later works, including comedies, tragedies, histories, and romances. Historical and cultural contexts.

0101	Scott Trudell MW 2:00pm - 3:15pm	Seats (Total: 27) TWS 1107

ENGL305 **Shakespeare and His Contemporaries: An Introduction**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Explore medieval and Renaissance drama and performance, placing the Shakespearean stage in its cultural and historical contexts.

0201	Scott Trudell MW 3:30pm - 4:45pm	Seats (Total: 27) TWS 1321

ENGL317 **African American Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Consideration of key texts in African American literature that explore the experiences of people of African descent in America from the mid-nineteenth century to the contemporary moment. Relationship between literary texts, historical events and cultural formations. Examines a range of texts and genres (autobiography, slave narrative, travel narrative, poetry, essays, fiction), and their contribution to national literary tradition.

Also offered as AASP398C and AMST328U. Credit granted for AASP398C, AMST328U, or ENGL317.

0101	Julius Fleming MW 5:00pm - 6:15pm	Seats (Total: 27) TWS 0221

ENGL329A **Special Topics in Film Studies; Cinema of Liberation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Studies in various periods and genres of film.

Also offered as CMLT398C. Credit granted for ENGL329A or CMLT398C. Repeatable to 9 credits if content differs. Studies in various periods and genres of film.

0201	Eugene Robinson Class time/details on ELMs	Seats (Total: 25) ONLINE

ENGL329D **Special Topics in Film Studies; Melodrama**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Studies in various periods and genres of film.

Also offered as FILM359M. Credit only granted for ENGL329D or FILM359M. Prerequisite: ENGL245, FILM245, SLLC283, or FILM283; or permission of instructor.

0101	Marianne Conroy	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	TWS 0236

ENGL329G **Special Topics in Film Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Studies in various periods and genres of film.

Prerequisite: ENGL245, FILM245, FILM283, or SLLC283; or permission of in structor. Also offered as FILM319B. Credit only granted for FILM319B or ENGL329G.

0101	Paul Cote	Seats (Total: 30)
	MW 3:30pm - 4:45pm	TWS 0236

ENGL329M **Special Topics in Film Studies; Ecomedia**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Studies in various periods and genres of film.

Prerequisite: ENGL245, FILM245, SLLC283, or FILM283; or permission of instructor. Credit only granted for: FILM311 or ENGL329M.

0101	Oliver Gaycken	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	TWS 0214

ENGL329W **Special Topics in Film Studies; Race, Film and Narrative**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Studies in various periods and genres of film.

Prerequisite: ENGL245, FILM245, FILM283, or SLLC283; or permission of instructor. Credit only granted for: FILM359W or ENGL329W.

0101	Oliver Gaycken	Seats (Total: 30)
	TuTh 9:30am - 10:45am	TWS 0205

ENGL329Y **Special Topics in Film Studies; A Cinema of Migration as Message**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Studies in various periods and genres of film.

0201	Eugene Robinson	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

ENGL344 **Nineteenth-Century Fiction**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Major British, American, and other fiction writers of the nineteenth century studied in the context of the broad global, intellectual, and artistic interests of the century.

0101	Nicole Hirschfelder	Seats (Total: 27)
	TuTh 9:30am - 10:45am	TWS 0236

ENGL349J **Asian American Literatures; New World Arrivals: Literature of Asian American Migration and Diaspora**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Study of selected writers, particular themes, or genres in Asian American literatures.

Also offered as AAST398J. Credit granted for AAST398J or ENGL349J.

0101	Edlie Wong	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	TWS 1107

ENGL352 **Intermediate Fiction Workshop**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of A- in ENGL271; or minimum grade of A- in ENGL272; or permission of ARHU-English department. Credit only granted for: ENGL396 or ENGL352. Formerly: ENGL396.

A class in the making of fiction. Intensive discussion of students' own fiction. Readings include both fiction and essays about fiction by practicing writers. Writing short critical papers, responding to works of fiction, and the fiction of colleagues, in-class writing exercises, intensive reading, and thinking about literature, in equal parts, and attendance at readings.

0101	Howard Norman M 3:30pm - 6:00pm	Seats (Total: 15) TWS 3250
0301	Emily Lyons Tu 3:30pm - 6:00pm	Seats (Total: 15) TWS 3134

ENGL353 **Intermediate Poetry Workshop**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of A- in ENGL271; or minimum grade of A- in ENGL273; or permission of ARHU-English department. Credit only granted for: ENGL397 or ENGL353. Formerly: ENGL397.

A class in the making of poetry. Intensive discussion of students' own poems. Readings in both poetry and essays about poetry by practicing poets. Writing short critical prose pieces, responding critically to colleagues' poems, in-class and outside writing exercises, memorization, and attendance at poetry readings.

0101	Amanda Allen, Elizabeth Arnold Th 3:30pm - 6:00pm	Seats (Total: 15) TWS 3250

ENGL354 **Intermediate Scriptwriting for Theater, Film, and Television**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail

Prerequisite: 1 course with a minimum grade of A- from (ENGL275, ARHU375, THET340).

Demystifies the art of dramatic writing. Students will come to understand that a play or screenplay is never a lecture, and that we write scripts to find out something about ourselves and the subjects we tackle. Students will analyze plays and screenplays, as well as workshop each others' scripts, to help them produce their own successful plays and screenplays written for the stage, screen, or box.

0101	Michael Olmert W 3:30pm - 6:00pm	Seats (Total: 25) TWS 1107

ENGL358F **Special Topics in U.S. Latinx Literature; Contemporary Latinx Literature**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topical study of selected works by U.S. Latinx writers.

0101	Randy Ontiveros	Seats (Total: 25)
	MW 2:00pm - 3:15pm	TWS 3134

ENGL359B **Special Topics in Lesbian, Gay, and Bisexual Literatures; Black Sexuality in Literature and Film**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected study of a topic pertinent to literary and cultural expressions of LGBTQ+ identities, positionalities, and analytics through an exploration of literature, art, and/or media.

Also offered as LGBT359B. Credit only granted for ENGL359B or LGBT359B. Prerequisite: Two lower-level English courses, at least one in literature; or permission of ARHU-English department. Repeatable to 9 credits if content differs.

0101	GerShun Avilez	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	TWS 1107

ENGL359C **Special Topics in Lesbian, Gay, and Bisexual Literatures; Queer Comedy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected study of a topic pertinent to literary and cultural expressions of LGBTQ+ identities, positionalities, and analytics through an exploration of literature, art, and/or media.

Also offered as LGBT359M. Credit only granted for ENGL359C or LGBT359M. Prerequisite: Two lower-level English courses, at least one in literature; or permission of ARHU-English department. Repeatable to 9 credits if content differs.

0101	Martha Nell Smith	Seats (Total: 25)
	MW 2:00pm - 3:15pm	TWS 0205

ENGL361 **Recovering Oral Histories**

Credits: 3 Grading Method: Regular General Education: DSHU, DSSP

Prerequisite: Students must have completed one course in English, Latin American Studies, or Education. Credit only granted for: ENGL261 or ENGL361.

Service-learning course that gives students an opportunity to develop writing, interviewing, and communication skills as they contribute to the work of a community organization. In the classroom, students will reflect on the process and do background research to understand the particular context of the organization's work. In the field, students will interview (or have informal discussions with) young people helped by the organization in order to construct a narrative about their lives, their perceptions of themselves, and their experiences.

Prerequisite: Must have completed at least one course in English or Latin American Studies. Credit only granted for: ENGL261 or ENGL361. Formerly: ENGL261/ENGL361

0101	Merle Collins TuTh 5:00pm - 6:15pm	Seats (Total: 15) TWS 0214

ENGL362 **Caribbean Literature in English**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DSHU, DVUP

Political and literary traditions that intersect in the fiction, poetry, and drama written in English by Caribbean writers, primarily during the 20th century.

Also offered as LASC348E. Credit granted for ENGL362 or LASC348E.

0101	Merle Collins TuTh 11:00am - 12:15pm	Seats (Total: 27) TWS 0221

ENGL368K **Special Topics in the Literature of Africa and the African Diaspora; The Art of Black Social Movements: Marcus Garvey to Black Lives Matter**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Comparisons among the literary traditions in Africa, the Caribbean, and North and South America.

Also offered as AMST328G. Credit granted for AMST328G or ENGL368K.

0101	Julius Fleming MW 3:30pm - 4:45pm	Seats (Total: 25) TWS 0201

ENGL369G **Special Topics in Study Abroad III; Adapting Literature to the Screen**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL369H **Special Topics in Study Abroad III; London Stage**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL369I **Special Topics in Study Abroad III; Images of Italy in the U.K. and U.S.A.**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL369L **Special Topics in Study Abroad III; Angloamerican Travelers in Spain**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL369Q **Special Topics in Study Abroad III; Literature of the Shoah**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL369X **Special Topics in Study Abroad III; Literature in Liguria**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL369Y **Special Topics in Study Abroad III; Literary Editing and Publishing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL369Z **Special Topics in Study Abroad III; The London Stage**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL370 **Junior Honors Conference**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Candidacy for honors in English.

Preparation for writing the senior honors project.

0101	Jason Rudy	Seats (Total: 20)
	W 3:30pm - 5:00pm	TWS 3132

ENGL378F **Special Topics in English; Paranoia, Conspiracies, and Fake News**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Offers sustained attention to notable current themes and approaches in English studies. Topics vary by section and semester.

0101	Andrew Ferguson	Seats (Total: 25)
	MWF 11:00am - 11:50am	TWS 0221

ENGL378G **Special Topics in English; Science and Fiction: From Milton to the Moon Landing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Offers sustained attention to notable current themes and approaches in English studies. Topics vary by section and semester.

0101	David Simon	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	TWS 1106

ENGL379B **Special Topics in Literature; Art, Architecture and Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Michael Olmert	Seats (Total: 25)
	MW 2:00pm - 3:15pm	TWS 1106

ENGL379R **Special Topics in Literature; The Jazz Paradigm**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as CMLT398D. Credit granted for CMLT398D or ENGL379R.

0201	Eugene Robinson	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

ENGL384 **Concepts of Grammar**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Introduction to the basic units of grammatical description; motivation for and nature of constituent structure and syntactic categories; fundamental grammatical concepts employed in the teaching and learning of languages.

0101	Michael Israel	Seats (Total: 20)
	MW 2:00pm - 3:15pm	TWS 3136

ENGL388C **Writing, Research, and Media Internships; Writing for Change**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail General Education: DSSP, DVUP

Field work in English studies.

Prerequisite: Permission of ARHU-English department. Recommended: ENGL101. Restriction: Requires application and references."

0101	Justin Lohr	Seats (Total: 18)	
	TuTh 3:30pm - 4:45pm	TWS 0207	
	Tu 2:00pm - 3:15pm	TWS 3252	Lab

ENGL388D **Writing, Research, and Media Internships; Dickinson Electronic Archives**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail

Field work in English studies.

Prerequisite: permission of the department. Contact Professor Martha Nell Smith, mnsmith@umd.edu

0101	Martha Nell Smith	Seats (Total: 5)
	Contact instructor or department for details.	

ENGL388M **Writing, Research, and Media Internships; Maryland General Assembly Writing Internship**

(Perm req)

Credits: 6 Grading Method: Regular General Education: DSSP

Field work in English studies.

Prerequisite: permission of department and completion of either ENGL381 or HONR368A. Also offered as HONR379W. Credit granted for ENGL388M or HONR379W.

0101	Thomas Lowderbaugh	Seats (Total: 15)
	Contact instructor or department for details.	
	Students can only register for six credits.	

ENGL388P **Writing, Research, and Media Internships; Pre-professional Internship**

(Perm req)

Credits: 1-6 Grading Method: Regular General Education: DSSP

Field work in English studies.

Prerequisite: permission of the department. Contact english@umd.edu.

0101	Karen Lewis	Seats (Total: 15)
	Contact instructor or department for details.	

ENGL388T **Writing, Research, and Media Internships; Digital Humanities Research Assistantship**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Field work in English studies.

Also offered as ENGL388T. Credit only granted for MITH388 or ENGL388T. Prerequisite: permission of department. Repeatable to 9 credits.

0101	Purdom Lindblad	Seats (Total: 10)
	Contact instructor or department for details.	

ENGL388V **Writing, Research, and Media Internships; Undergraduate Teaching Assistants in English**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail General Education: DSSP

Field work in English studies.

Prerequisite: permission of department. Repeatable to 12 credits. Contact Lyra Hilliard, lyrahill@umd.edu. Students taking ENGL388V for the first time should register for either section 0101 or 0401 for 4 credits. When taking the course again in subsequent semesters, students should register for 2001 or 3001 for 3 credits."

0101	Lyra Hilliard W 5:00pm - 6:30pm	Seats (Total: 20) TWS 1320
0401	Justin Lohr Th 5:00pm - 6:30pm	Seats (Total: 20) TWS 1320
2001	Lyra Hilliard Contact instructor or department for details.	Seats (Total: 10)
3001	Justin Lohr Contact instructor or department for details.	Seats (Total: 10)

ENGL388W **Writing, Research, and Media Internships; Writing Center Internship**

(Perm req)

Credits: 1-6 Grading Method: Regular General Education: DSSP

Field work in English studies.

Prerequisite: permission of department. Repeatable to 12 credits. To apply, go to http://www.english.umd.edu/academics/writingcenter/ internship. Students taking ENGL388W for the first time should register for section 0101 for 4 credits. When taking the course a gain in subsequent semesters, students should register for 2001.

0101	Thomas Earles M 3:30pm - 6:00pm *Students should register for four credits.*	Seats (Total: 20) TWS 3252
2001	Thomas Earles Contact instructor or department for details.	Seats (Total: 4)

ENGL390 **Science Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits; and junior standing or higher. Credit only granted for: ENGL390 or ENGL393S. Formerly: ENGL393S.

Specifically designed for students interested in further study in the physical and biological sciences. Exposes students to the conventions of scientific prose in the genres of research articles and proposals. Students learn to accommodate scientific information to general audiences.

Click here for more course information.

0201	Michael Schmidt MWF 10:00am - 10:50am	Seats (Total: 19) SQH 1111
0301	Katherine Oneill MWF 11:00am - 11:50am	Seats (Total: 19) TWS 1105
0401	Katherine Oneill MWF 12:00pm - 12:50pm	Seats (Total: 19) TWS 1105
0501	Katherine Oneill MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 0207
1001	Robin Allen-Klein TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 0221
1101	Robin Allen-Klein TuTh 9:30am - 10:45am	Seats (Total: 19) KNI 1105
1102	Diana Friedman TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 3136
1301	Diana Friedman TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 3252
1701	Richard Reynnells Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 0207
1801	Richard Reynnells W 6:30pm - 9:10pm	Seats (Total: 19) TWS 0236
9001	Andrew Delfino Class time/details on ELMs	Seats (Total: 19) ONLINE
9002	Andrew Delfino Class time/details on ELMs	Seats (Total: 19) ONLINE

9003	Kate Wilson Class time/details on ELMs	Seats (Total: 19) ONLINE
9004	Kate Wilson Class time/details on ELMs	Seats (Total: 19) ONLINE

ENGL390H **Science Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits; and junior standing or higher. Credit only granted for: ENGL390 or ENGL393S. Formerly: ENGL393S.

Specifically designed for students interested in further study in the physical and biological sciences. Exposes students to the conventions of scientific prose in the genres of research articles and proposals. Students learn to accommodate scientific information to general audiences.

Restricted to students in the University or departmental Honors program.

0101	Marybeth Shea MWF 9:00am - 9:50am	Seats (Total: 19) TWS 0224
0301	Marybeth Shea MWF 11:00am - 11:50am	Seats (Total: 19) TWS 0224

ENGL391 **Advanced Composition**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

An advanced composition course which emphasizes constructing written arguments accommodated to real audiences.

Click here for more information on professional writing courses.

0001	Mark Forrester MWF 8:00am - 8:50am	Seats (Total: 19) TWS 0205
0101	Erica Southerland MWF 9:00am - 9:50am	Seats (Total: 19) KEY 0102

0301	Anna Szczepaniec-Bialas MWF 11:00am - 11:50am	Seats (Total: 19) TWS 0232
0401	Mark Forrester MWF 12:00pm - 12:50pm	Seats (Total: 19) TWS 1321
0402	Anna Szczepaniec-Bialas MWF 12:00pm - 12:50pm	Seats (Total: 19) TWS 0224
0601	Martha Thomas MW 2:00pm - 3:15pm	Seats (Total: 19) TWS 1105
0701	Martha Thomas MW 3:30pm - 4:45pm	Seats (Total: 19) TWS 0207
1101	Erica Southerland TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0207
1102	Radford Skudrna TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 1106
1201	Erica Southerland TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 0207
1202	Robin Allen-Klein TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 0234
1401	Alexandra Calloway TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 0234
1701	Robert Crane Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 0234
1901	Mark Fitzgerald Th 6:30pm - 9:10pm	Seats (Total: 19) TWS 0234
6101	Catherine Bayly MF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 19) ATL 0201 ONLINE *This class meets in person twice a week; the other class work is done online.*

9001	Kate Wilson Class time/details on ELMs	Seats (Total: 19) ONLINE
9002	Kate Wilson Class time/details on ELMs	Seats (Total: 19) ONLINE
9003	Ann Mason Class time/details on ELMs	Seats (Total: 19) ONLINE
9004	Ann Mason Class time/details on ELMs	Seats (Total: 19) ONLINE
9005	Daune O'Brien Class time/details on ELMs	Seats (Total: 19) ONLINE

ENGL391H **Advanced Composition**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

An advanced composition course which emphasizes constructing written arguments accommodated to real audiences.

Restricted to students in the University or departmental Honors program.

Click here for more information on professional writing courses.

0201	Mark Forrester MWF 10:00am - 10:50am	Seats (Total: 19) TWS 0234

ENGL392 **Legal Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

Conventions of legal writing and research. Students learn how to read and write about cases, statutes or other legislation; how to apply legal principles to fact scenarios; and how to present a written analysis for readers in the legal profession. Assignments may include the law-school application essay, case briefs, legal memos, and client letters.

Click here for more information on professional writing courses.

0201	Roberta Ward MWF 10:00am - 10:50am	Seats (Total: 19) TWS 0232
0301	Anne-Marie Carstens MWF 11:00am - 11:50am	Seats (Total: 19) TWS 0230
1101	Robin Earnest TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0224
1201	Robin Earnest TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 0224
1301	John Kim TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 0234
1601	Michael Winett M 6:30pm - 9:10pm	Seats (Total: 19) TWS 0232
1701	Michael Winett Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 0232
1801	Michael Winett W 6:30pm - 9:10pm	Seats (Total: 19) TWS 0232

ENGL393 **Technical Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

The writing of technical papers and reports.

Click here for more information on professional writing courses.

0001	Patrick Nelson MWF 8:00am - 8:50am	Seats (Total: 19) TWS 0207
0101	Mark Fitzgerald MWF 9:00am - 9:50am	Seats (Total: 19) TWS 0207
0102	Caleb Kriesberg MWF 9:00am - 9:50am	Seats (Total: 19) TWS 0234

0201	Elliot Berger MWF 10:00am - 10:50am	Seats (Total: 19) TWS 0207
0202	Peter Grybauskas MWF 10:00am - 10:50am	Seats (Total: 19) TWS 1105
0301	Caleb Kriesberg MWF 11:00am - 11:50am	Seats (Total: 19) TWS 1321
0302	Joan Mooney MWF 11:00am - 11:50am	Seats (Total: 19) TWS 0234
0401	Joan Mooney MWF 12:00pm - 12:50pm	Seats (Total: 19) TWS 0234
0402	Elliot Berger MWF 12:00pm - 12:50pm	Seats (Total: 19) TWS 0207
0501	Caleb Kriesberg MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 0234
0502	Peter Grybauskas MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 1105
0701	Joshua Buursma MW 3:30pm - 4:45pm	Seats (Total: 19) TWS 0234
0801	Charles Jones MW 5:00pm - 6:15pm	Seats (Total: 19) TWS 0207
1001	Alexandra Calloway TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 0207
1101	Elizabeth McClure TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0221
1102	Danuta Hinc TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0223
1201	Elizabeth McClure TuTh 11:00am - 12:15pm	Seats (Total: 19) ARC 1123

1202	Kisa Lape TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 0223
1401	Elizabeth McClure TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 3136
1501	Danuta Hinc TuTh 3:30pm - 4:45pm	Seats (Total: 19) TWS 0223
1505	Alysia Sawchyn TuTh 5:00pm - 6:15pm	Seats (Total: 19) TWS 0207
1601	Kelly Cresap M 6:30pm - 9:10pm	Seats (Total: 19) TWS 1106
1602	Mrim Boutla M 6:30pm - 9:10pm	Seats (Total: 19) TWS 0234
1701	Peter Witte Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 0214
1702	Dennis Winston Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 0221
1801	Kelly Cresap W 6:30pm - 9:10pm	Seats (Total: 19) TWS 1105
1802	Robert Oliver W 6:30pm - 9:10pm	Seats (Total: 19) TWS 0205
1901	Patrick Nelson Th 6:30pm - 9:10pm	Seats (Total: 19) TWS 0221
1902	Peter Witte Th 6:30pm - 9:10pm	Seats (Total: 19) TWS 0201
9001	Phillip Moses Class time/details on ELMs	Seats (Total: 19) ONLINE
9002	Ann Mason Class time/details on ELMs	Seats (Total: 19) ONLINE

9003	Daniel Saalfeld Class time/details on ELMs	Seats (Total: 19) ONLINE
9004	Daniel Saalfeld Class time/details on ELMs	Seats (Total: 19) ONLINE
9005	Daniel Saalfeld Class time/details on ELMs	Seats (Total: 19) ONLINE
9007	Daniel Saalfeld Class time/details on ELMs	Seats (Total: 19) ONLINE
9008	Sheila Lalwani Class time/details on ELMs	Seats (Total: 19) ONLINE
9009	Sheila Lalwani Class time/details on ELMs	Seats (Total: 19) ONLINE
9010	Sheila Lalwani Class time/details on ELMs	Seats (Total: 19) ONLINE
9011	Sheila Lalwani Class time/details on ELMs	Seats (Total: 19) ONLINE
9012	David Miles Class time/details on ELMs	Seats (Total: 19) ONLINE
9013	David Miles Class time/details on ELMs	Seats (Total: 19) ONLINE
9014	Sarah Dammeyer Class time/details on ELMs	Seats (Total: 19) ONLINE
9015	Sarah Dammeyer Class time/details on ELMs	Seats (Total: 19) ONLINE
9016	David Miles Class time/details on ELMs	Seats (Total: 19) ONLINE
9017	David Miles Class time/details on ELMs	Seats (Total: 19) ONLINE

9018	Michelle Von Euw Class time/details on ELMs	Seats (Total: 19) ONLINE
9019	Michelle Von Euw Class time/details on ELMs	Seats (Total: 19) ONLINE
9020	Michelle Von Euw Class time/details on ELMs	Seats (Total: 19) ONLINE

ENGL393H **Technical Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

The writing of technical papers and reports.

Restricted to students in the University or departmental Honors proram.

Click here for more information on professional writing courses.

9001	Christopher Crane Class time/details on ELMs	Seats (Total: 19) ONLINE

ENGL393Q **Technical Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

The writing of technical papers and reports.

3001	Alexandra Calloway F 9:00am - 11:40am *The writing of technical papers and reports with additional service learning hours required to be completed as part of the course.*	Seats (Total: 19) TWS 3252

ENGL393X **Technical Writing**

(Perm req)

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

The writing of technical papers and reports.

Click here for more information on professional writing courses.

1401	Danuta Hinc TuTh 2:00pm - 3:15pm	Seats (Total: 15) TWS 0223
	Restricted to students for whom English is a second language. For permission contact Grace Crussiah gjc@umd.edu.	

ENGL394 **Business Writing**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

Intensive practice in the forms of written communication common in the business world-letters, memos, short reports, and proposals. Principles of rhetoric and effective style.

Click here for more information on professional writing courses.

0101	Elliot Berger MWF 9:00am - 9:50am	Seats (Total: 19) TWS 1105
0202	Robert Lucci MWF 10:00am - 10:50am	Seats (Total: 19) TWS 0224
0302	Kimberly Banks, Pamela Orel MWF 11:00am - 11:50am	Seats (Total: 19) TWS 0223
0401	Ceil Goldberg MWF 12:00pm - 12:50pm	Seats (Total: 19) TWS 0232
0402	Pamela Orel, Kimberly Banks MWF 12:00pm - 12:50pm	Seats (Total: 19) TWS 0223
0501	Ceil Goldberg MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 0232
0601	Thomas Lowderbaugh MW 2:00pm - 3:15pm	Seats (Total: 19) TWS 0232

0702	Anna Szczepaniec-Bialas MW 3:30pm - 4:45pm	Seats (Total: 19) TWS 0224
0801	Erica Cochran MW 5:00pm - 6:15pm	Seats (Total: 19) TWS 1105
0802	Robert Oliver MW 5:00pm - 6:15pm	Seats (Total: 19) TWS 1106
1103	Holly Smith TuTh 9:30am - 10:45am	Seats (Total: 19) JMZ 0103
1201	Holly Smith TuTh 11:00am - 12:15pm	Seats (Total: 19) JMZ 0118
1202	Radford Skudrna TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 1106
1302	Adam Lloyd TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 0230
1401	Radford Skudrna TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 1105
1402	Adam Lloyd TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 0230
1502	Kevin Wisniewski TuTh 3:30pm - 4:45pm	Seats (Total: 19) TWS 0234
1506	Kevin Wisniewski TuTh 5:00pm - 6:15pm	Seats (Total: 19) TWS 0234
1601	Robert Oliver M 6:30pm - 9:10pm	Seats (Total: 19) TWS 0236
1801	Jonathan Rick W 6:30pm - 9:10pm	Seats (Total: 19) TWS 0234
3001	Ellen Blumner F 9:00am - 11:40am	Seats (Total: 19) TWS 3132

9001	Pamela Orel Class time/details on ELMs	Seats (Total: 19) ONLINE
9002	Pamela Orel Class time/details on ELMs	Seats (Total: 19) ONLINE
9003	Pamela Orel Class time/details on ELMs	Seats (Total: 19) ONLINE
9004	Daune O'Brien Class time/details on ELMs	Seats (Total: 19) ONLINE
9005	Clare Parsons Class time/details on ELMs	Seats (Total: 19) ONLINE
9006	Clare Parsons Class time/details on ELMs	Seats (Total: 19) ONLINE
9009	Clare Parsons Class time/details on ELMs	Seats (Total: 19) ONLINE
9010	Clare Parsons Class time/details on ELMs	Seats (Total: 19) ONLINE
9012	Karen Angeline Class time/details on ELMs	Seats (Total: 19) ONLINE
9013	Karen Angeline Class time/details on ELMs	Seats (Total: 19) ONLINE
9014	Karen Angeline Class time/details on ELMs	Seats (Total: 19) ONLINE
9015	Karen Angeline Class time/details on ELMs	Seats (Total: 19) ONLINE
SG98	Katherine Robinson TuTh 9:30am - 10:45am *Restricted to COMM students at Shady Grove.*	Seats (Total: 19) BLD3 4203

ENGL395 **Writing for Health Professions**

Credits: 3 Grading Method: Regular General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

Focus on accommodating technical material and empirical studies to lay audiences, and helping writers to achieve stylistic flexibility and correctness.

Click here for more information on professional writing courses.

0101	James Goodwin MWF 9:00am - 9:50am	Seats (Total: 19) KEY 0124
0201	James Goodwin MWF 10:00am - 10:50am	Seats (Total: 19) JMZ 1122
0202	Michelle Moncrieffe MWF 10:00am - 10:50am	Seats (Total: 19) ASY 3219
0301	Michelle Moncrieffe MWF 11:00am - 11:50am	Seats (Total: 19) KNI 1105
0601	Michael Schmidt MW 2:00pm - 3:15pm	Seats (Total: 19) TWS 0207
0701	Michael Schmidt MW 3:30pm - 4:45pm	Seats (Total: 19) TWS 1320
1002	Joseph Angelella TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 0201
1101	Joseph Angelella TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0201
1301	Kisa Lape TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 0232
1501	Kisa Lape TuTh 3:30pm - 4:45pm	Seats (Total: 19) TWS 0230
1505	Kisa Lape TuTh 5:00pm - 6:15pm	Seats (Total: 19) TWS 0230

1701	Nicole Cuffy Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 1105
SG91	Joseph Wappel TuTh 12:30pm - 1:45pm *Restricted to Public Health students at -Shady Grove.*	Seats (Total: 9) Location: TBA
SG92	Joseph Wappel TuTh 2:00pm - 3:15pm *Restricted to Public Health students at Shady Grove.*	Seats (Total: 19) BLD3 4226
SG97	Joseph Wappel TuTh 12:30pm - 1:45pm *Restricted to Biological Sciences majors at Shady Grove. All other students email usgbiosci@umd.edu for permission.*	Seats (Total: 10) BLD3 4220
SG98	Joseph Wappel TuTh 11:00am - 12:15pm *Restricted to Biological Sciences majors at Shady Grove. All other students email usgbiosci@umd.edu for permission.*	Seats (Total: 19) BLD3 4220

ENGL398A **Topics in Professional Writing; Writing for the Arts**

Credits: 3 Grading Method: Regular General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement.

0701	Dennis Winston M 6:30pm - 9:10pm	Seats (Total: 19) KEY 0120
1001	Caroline Wilkins TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 1107
1101	Caroline Wilkins TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0234

1801	Dennis Winston W 6:30pm - 9:10pm	Seats (Total: 19) KEY 0120

ENGL398B **Topics in Professional Writing; Writing for Social Entrepreneurship**

Credits: 3 Grading Method: Regular General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This c ourse satisfies the professional writing requirement.

0601	Eric Thiel MW 2:00pm - 3:15pm	Seats (Total: 19) TWS 0234
0701	Eric Thiel MW 3:30pm - 4:45pm	Seats (Total: 19) TWS 1105
0801	Eric Thiel MW 5:00pm - 6:15pm	Seats (Total: 19) TWS 1321
1601	Maurice Boissiere M 6:30pm - 9:10pm	Seats (Total: 19) TWS 0207
1701	Mrim Boutla Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 1106
1901	Roxanne Clements Th 6:30pm - 9:10pm	Seats (Total: 19) TWS 1106
SG91	Katherine Robinson TuTh 12:30pm - 1:45pm *Restricted to Senior BMGT-Shady Grove students. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.*	Seats (Total: 19) BLD2 3012

SG92	Katherine Robinson TuTh 2:00pm - 3:15pm	Seats (Total: 19) BLD2 3012
	Restricted to Senior BMGT-Shady Grove students. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.	

ENGL398C **Topics in Professional Writing; Writing Case Studies and Investigative Reports**

Credits: 3 Grading Method: Regular General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement.

0801	Joshua Buursma MW 5:00pm - 6:15pm	Seats (Total: 19) TWS 0234
0901	Joshua Buursma MW 6:30pm - 7:45pm	Seats (Total: 19) TWS 0214
SG91	Joseph Wappel TuTh 9:30am - 10:45am	Seats (Total: 19) BLD3 2203
	Registration is restricted to CCJS-Shady Grove students.	

ENGL398E **Topics in Professional Writing; Writing about Economics**

Credits: 3 Grading Method: Regular General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement.

0801	Michael Winett MW 5:00pm - 6:15pm	Seats (Total: 19) TWS 0232

ENGL398L **Topics in Professional Writing; Scholarly Writing in the Humanities**

Credits: 3 Grading Method: Regular General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite:60 credits and completion of ENGL101. This course satisfies the professional writing requirement.An advanced composition class focusing on the norms and procedures of advanced academic writing.

0301	Mark Forrester MWF 11:00am - 11:50am	Seats (Total: 19) TWS 0207

ENGL398N **Topics in Professional Writing; Writing for Non-Profit Organizations**

Credits: 3 Grading Method: Regular General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement.

0301	Cheryl Spinner MWF 11:00am - 11:50am	Seats (Total: 19) ARC 1127
0501	Cheryl Spinner MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 1321
0601	Heidi Scott MW 2:00pm - 3:15pm	Seats (Total: 19) HBK 0123
1001	David Todd TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 0224
1002	Rachel Feingold TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 3252
1101	David Todd TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0230
1102	Alysia Sawchyn TuTh 9:30am - 10:45am	Seats (Total: 19) KNI 1103

1201	David Todd TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 0230
1301	Rebecca Holden TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 0224
1401	Rebecca Holden TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 0224
1402	Alysia Sawchyn TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 0207

ENGL398R **Topics in Professional Writing; Writing Non-Fictional Narratives**

Credits: 3 Grading Method: Regular General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement.

1001	Stewart Foehl TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 0234
1101	Pamela Gerhardt TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0232
1102	Stewart Foehl TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 1107
1201	Pamela Gerhardt TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 0232
1202	Rachel Feingold TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 3252
1505	Pamela Gerhardt TuTh 5:00pm - 6:15pm	Seats (Total: 19) TWS 0224

ENGL398V **Topics in Professional Writing; Writing about the Environment**

Credits: 3 Grading Method: Regular General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement.

1201	Shannon Zellars Strohl TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 1105
1301	Shannon Zellars Strohl TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 0207
1401	Kevin Wisniewski TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 0214
1701	Kevin Wisniewski Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 0201

ENGL402 Chaucer

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Works read in Middle English. Readings may include Canterbury Tales, Troilus and Criseyde, dream visions, lyrics.

0101	Thomas Moser MWF 10:00am - 10:50am	Seats (Total: 22) TWS 0236

ENGL404 Shakespeare: The Later Works

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Close study of selected plays from the second half of Shakespeare's career. Generic issues of later tragedies, later comedies, romances. Language, theme, dramatic technique, sources, and early modern English social-historical context.

0201	Christopher Crane	Seats (Total: 22)
	TuTh 5:00pm - 6:15pm	TWS 0221

ENGL408B **Literature by Women Before 1800; Saints and Sinners, Virgins and Queens: Medieval Women Reading and Writing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected writings by women in the medieval and early modern era.

0101	Theresa Coletti	Seats (Total: 15)
	MW 2:00pm - 3:15pm	TWS 0214

ENGL409C **Study Abroad Special Topics IV; Shakespeare's Italian Plays**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL409K **Study Abroad Special Topics IV; A Moveable Feast: Writing about Food**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL409L **Study Abroad Special Topics IV; Literature of London**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL409N **Study Abroad Special Topics IV; Fashion, Media and Communication**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ENGL425 **Modern British Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Major Modernist writers in English prose and poetry since 1900. Such writers as Eliot, Larkin, Forster, Burgess, Durrell, Henry Green, Golding, Auden, Malcolm Lowry, Joyce, and Yeats.

0101	Brian Richardson	Seats (Total: 22)
	MW 5:00pm - 6:15pm	TWS 0201

ENGL428L **Seminar in Language and Literature; Fictions of Asylum/Asylum Fictions**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics will vary each semester. The course will provide a seminar experience in material or methodologies not otherwise available to the major.

Restriction: Junior standing. For ENGL majors only. Course intended primarily for students in English Honors Program. English majors with strong academic records may also apply. Permission from the Director of Honors required.

0101	Sangeeta Ray	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	TWS 3250

ENGL429 **Independent Research in English**

(Perm req)

Credits: 1-6 Grading Method: Regular

An advanced independent research project for qualified students, supervised by an English faculty member, on a topic not ordinarily covered in available courses.

Prerequisite: ENGL301 and two English courses, excluding Fundamental Studies requirement.

Contact department for information to register for this course.

ENGL435 **American Poetry: Beginning to the Present**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Selections of American poetry, from Bradstreet to contemporary free verse. Authors such as Whitman, Dickinson, Bishop, Hughes, Rich, and Frost.

Also offered as LGBT459M. Credit granted for ENGL435 or LGBT459M.

Contact department for information to register for this course.

ENGL437 **Contemporary American Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Prose, poetry, drama of living American writers. Current cultural and social issues.

Contact department for information to register for this course.

ENGL439C **Spotlight on Major Writers; Hemingway and his Competitors**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive study of a single writer, or a handful of writers, to understand the shifts in the writer's craft and cultural influence, both past and present.

0101	David Wyatt	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	TWS 0236

ENGL440 **The Novel in America to 1914**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Survey of the American novel to World War I. Cultural and philosophical contexts; technical developments in the genre. Authors such as Melville, Wells Brown, James, Sedgwick, Chopin.

0101	Robert Levine	Seats (Total: 22)
	MW 3:30pm - 4:45pm	TWS 1106

ENGL455 **The Eighteenth-Century English Novel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

The origins and development of the British novel, from the late seventeenth century until the beginning of the nineteenth. Questions about what novels were, who wrote them, and who read them. Authors such as Behn, Defoe, Richardson, Fielding, Sterne, Smollett, Burney, Radcliffe, and Austen.

0101	Tita Chico	Seats (Total: 22)
	MW 5:00pm - 6:15pm	TWS 0205

ENGL456 **The Nineteenth-Century English Novel**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Surveys major novels of the period. Attention to narrative form and realism; representations of gender and class; social contexts for reading, writing and publishing. Authors such as Austen, Bronte, Dickens, George Eliot, Trollope.

0101	James Goodwin	Seats (Total: 22)
	MW 3:30pm - 4:45pm	TWS 0221

ENGL457 **The Modern Novel**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Modernism in the novel of the twentieth century. Such writers as Joyce, Lawrence, Murdoch, James, Forster, Faulkner, Hemingway, Fitzgerald, Ellison, Welty, Nabokov and Malamud.

0201	Brian Richardson	Seats (Total: 22)
	MW 2:00pm - 3:15pm	TWS 0201

ENGL462 **Folksong and Ballad**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

A cross-section of American folk and popular songs in their cultural contexts; artists from Bill Monroe to Robert Johnson.

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

0101	Barry Pearson	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	TWS 0201

ENGL466 **Arthurian Legend**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Development of Arthurian legend in English and continental literature from Middle Ages to twentieth century. All readings in modern English.

0201	Kellie Robertson	Seats (Total: 22)
	TuTh 12:30pm - 1:45pm	TWS 0201

ENGL469B **The Craft of Literature: Creative Form and Theory; The Structure of Fiction: How to Tell a True War Story**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Examines various forms of poetry and/or fiction, emphasizing the practice of making literary art and the aesthetic and theoretical approaches that define it. Students will practice the elements of literary craft, producing and experimenting with a wide range of forms and conventions in poetry and/or fiction. They will also produce critical work that articulates and contextualizes theoretical approaches to the making of literary art.

Prerequisite: 2 ENGL courses in literature or creative writing; and have completed a 200-level creative writing workshop in ENGL. Or permission of ARHU-English department.

0101	Maud Casey	Seats (Total: 20)
	MW 2:00pm - 3:15pm	TWS 0236

ENGL471 **African-American Literature: 1910-1945**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Emergence of modernism in African-American writing including debates over the definition of unique African-American aesthetics, with emphasis on conditions surrounding the production of African-American literatures.

Also offered as AASP478N. Credit granted for ENGL471 or AASP478N.

0101	Laura Williams	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	TWS 1106

ENGL475 **Postmodern Literature**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

The origins and ongoing development of postmodern literature. Aspects o the "postmodern condition," such as the collapse of identity, the erasure of cultural and aesthetic boundaries, and the dissolution of life into textuality. The novel and other genres and media.

Contact department for information to register for this course.

ENGL478K **Selected Topics in English and American Literature before 1800; Early Modern to Post-Modern Poetry**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature or permission of ARHU-English Department. Repeatable to 9 credits if content differs.

0101	David Wyatt	Seats (Total: 22)
	TuTh 2:00pm - 3:15pm	TWS 0221

ENGL479G **Selected Topics in English and American Literature after 1800; Horror Fiction and Media Necromancy**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature or permission of ARHU-English department. Repeatable to 9 credits if content differs.

0101	Andrew Ferguson	Seats (Total: 15)
	MWF 12:00pm - 12:50pm	TWS 0221

ENGL479M **Selected Topics in English and American Literature after 1800; Roots, Music and Film**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English course s in literature or permission of ARHU-English department. Repeatable to 9 credits if content differs.

0101	Barry Pearson	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	TWS 0201

ENGL479V **Selected Topics in English and American Literature after 1800; Aesthetes, Decadents, and the New Women**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Two English courses in literature or permission of ARHU-English Department. Repeatable to 9 credits if content differs.

0101	Jason Rudy	Seats (Total: 22)
	MW 2:00pm - 3:15pm	TWS 1321

ENGL483 **American English(es)**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: LING200, ENGL280, or HESP120; or permission of ARHU-English department.

Examines the diversity of dialects, registers, and jargons of English found in the United States, as well as their origins, structures, and functions in society.

0101	Linda Coleman	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	TWS 0236

ENGL487 **Principles and Practices of Rhetoric**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ENGL487 or COMM401.

A seminar examining foundational concepts and approaches in the theory and practice of rhetoric in civic, professional, academic, and interpersonal settings; focusing on key issues in persuasion, argumentation, and eloquence in historical and contemporary contexts.

0101	Vessela Valiavitcharska	Seats (Total: 20)
	MW 3:30pm - 4:45pm	TWS 0205

ENGL488R **Topics in Advanced Writing; Qualitative Research Methods**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Different genres of technical and professional writing including proposal writing, computer documentation, technical report writing, instruction manuals, etc. Students will analyze models of a genre, produce their own versions, test, edit and revise them.

0201	Sara Wilder	Seats (Total: 18)
	TuTh 2:00pm - 3:15pm	TWS 0205

ENGL489J **Special Topics in Language and Rhetoric; Digital Rhetorics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in language and rhetoric, such as discourse analysis, semantics, or cognitive linguistics; comparative rhetoric and rhetorical theory, digital rhetorics, women's and minority rhetorics, or the history of rhetoric.

0101	Andrew Ferguson	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	TWS 1107

ENGL489N **Special Topics in Language and Rhetoric; Invention of "Proper English": from the English Enlightenment to the American Experience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in language and rhetoric, such as discourse analysis, semantics, or cognitive linguistics; comparative rhetoric and rhetorical theory, digital rhetorics, women's and minority rhetorics, or the history of rhetoric.

0101	Michael Israel	Seats (Total: 22)
	MWF 1:00pm - 1:50pm	TWS 3136

ENGL489P **Special Topics in Language and Rhetoric; The Language of Political Persuasion**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in language and rhetoric, such as discourse analysis, semantics, or cognitive linguistics; comparative rhetoric and rhetorical theory, digital rhetorics, women's and minority rhetorics, or the history of rhetoric.

0101	Linda Coleman	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	TWS 0205

ENGL495 **Independent Study in Honors**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENGL373 and ENGL370. Restriction: Must be in English Language and Literature program; and candidacy for honors in English.

Completion and presentation of the senior honors project.

Contact department for information to register for this course.

ENGL497 **English at Work**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: ENGL301; and an ENGL course at the 300-level or higher. Restriction: Must have earned a minimum of 60 credits.

Examines how English majors put their academic knowledge and skills to work in professional workplaces after graduation. Students learn strategies to research careers, and they shadow a person in a career of interest for a day. Students learn to compose different professional genres to write and speak about and for professional development and advancement, including inquiry letters, technical descriptions, professional portfolios, and elevator pitches. Students will critically examine the learning they have done in their undergraduate coursework and compose a vision for bringing that learning to life in their future work.

0101	Blake Wilder TuTh 2:00pm - 3:15pm	Seats (Total: 20) TWS 1321

ENGL498 **Advanced Fiction Workshop; Advanced Fiction Workshop**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

An advanced class in the making of fiction. Intensive discussion of students' own fiction. Readings include both fiction and essays about fiction by practicing writers. Writing short critical papers, responding to works of fiction, and to colleagues' fiction, in-class writing exercises, intensive reading, and thinking about literature, in equal parts, and attendance at readings.

Prerequisite: ENGL396 or ENGL352; or permission of department.

0101	Gabrielle Fuentes Tu 3:30pm - 6:00pm	Seats (Total: 15) TWS 3252
0201	Rachel Waugh M 3:30pm - 6:00pm	Seats (Total: 15) TWS 3134
0301	Howard Norman Th 3:30pm - 6:00pm	Seats (Total: 15) TWS 3136

ENGL499 **Advanced Poetry Workshop; Advanced Poetry Workshop**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail

An advanced class in the making of poetry. Intensive discussion of students' own poems. Readings include both poetry and essays about poetry by practicing poets. Writing short critical prose pieces, responding critically to colleagues' poems, in-class and outside writing exercises, and attendance at poetry readings.

Prerequisite: ENGL397 or ENGL353; or permission of department.

0101	Thibault Raoult, Stanley Plumly W 3:30pm - 6:00pm	Seats (Total: 15) TWS 3252

ENGL611 **Approaches to College Composition**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Permission of ARHU-English department. Additional information: Required for graduate assistants (optional to other graduate students).

A seminar emphasizing rhetorical and linguistic foundations for the handling of a course in freshman composition.

0101	Scott Wible M 12:00pm - 2:30pm	Seats (Total: 14) TWS 3252

ENGL623 **Readings in Eighteenth-Century English Literature**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

0101	Laura Rosenthal M 3:30pm - 6:00pm	Seats (Total: 14) TWS 3132

ENGL649B **Readings in Rhetoric, Composition, and Literacy; Research Methods in Rhetoric, Composition, and Literacy**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Readings in Rhetoric, Composition, and Literacy. Special Topics in the theory and research of rhetoric, composition, and literacy

0101	Sara Wilder	Seats (Total: 14)
	Tu 3:30pm - 6:00pm	TWS 1106

ENGL658B **Readings in Multi-Ethnic Literatures of the Americas; Drugs and Terror**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Highlights the cultural diversity of American literatures from various periods, including Latino/a, Native American, Asian American, and African American literatures within and beyond the United States.

0101	Sharada Balachandran Orihuela	Seats (Total: 14)
	W 3:30pm - 6:00pm	TWS 3136

ENGL679 **Professional and Career Mentoring for Master's Students**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Augments advising currently provided by the English Department Graduate Studies Office. Individual professional and career mentoring for MA and MFA students from a faculty member.

Contact department for information to register for this course.

ENGL688 **Poetry Workshop; Poetry Workshop**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Poetry workshop.

0101	Elizabeth Arnold	Seats (Total: 12)
	W 3:30pm - 6:00pm	TWS 3134

ENGL689 **Fiction Workshop; Fiction Workshop**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Fiction workshop.

0101	Maud Casey	Seats (Total: 12)
	W 3:30pm - 6:00pm	TWS 3250

ENGL699 **Independent Study**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Contact department for information to register for this course.

ENGL719B **Seminar in Renaissance Literature; Sex Education: Women, Sex, and Gender in the Early Modern Period**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

0101	Kim Coles	Seats (Total: 11)
	M 3:30pm - 6:00pm	TWS 1107

ENGL719I **Seminar in Renaissance Literature; Writing the Cosmos: Literature and Science in the Seventeenth Century**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

0101	David Simon	Seats (Total: 11)
	Tu 6:30pm - 9:00pm	TWS 3136

ENGL748C **Seminar in American Literature; Dickinson and Sexual/Textual Geographies**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

0101	Martha Nell Smith	Seats (Total: 11)
	M 6:30pm - 9:00pm	TWS 3136

ENGL759B **Seminar in Literature and the Other Arts; Art and Black Queer Studies**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

0101	GerShun Avilez	Seats (Total: 11)
	Th 6:30pm - 9:00pm	TWS 3136

ENGL759C **Seminar in Literature and the Other Arts; Book Lab: How To Do Things With Books**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

0101	Matthew Kirschenbaum	Seats (Total: 11)
	Tu 3:30pm - 6:00pm	TWS 3250

ENGL788 **Studies in Poetic Form**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

0101	Michael Collier M 3:30pm - 6:00pm	Seats (Total: 11) TWS 3136

ENGL789 **Form and Theory in Fiction**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

A variety of prose modes (mediations, psychological studies, reportage myths, collage, magic realism, satire, etc.). Some of the writers to be read include Kafka, Cather, Barth, Kundera, and Barthelme.

0101	Gabrielle Fuentes Th 3:30pm - 6:00pm	Seats (Total: 11) TWS 3134

ENGL798B **Critical Theory Colloquium**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

An intensive advanced exploration of current problems and issues in critical theory.

0101	Christina Walter TBA	Seats (Total: 15) TWS 3132

ENGL798D **Critical Theory Colloquium; Digital Studies**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

An intensive advanced exploration of current problems and issues in critical theory.

Also offered as MITH729. Credit granted for MITH729 or ENGL798D. Class meets in TWS 3136 on the following dates: 2/10, 2/24, 3/3, 3/31, and 4/28.

0101	Matthew Kirschenbaum **Meets February 10, 2019 - April 28, 2019** F 3:00pm - 5:00pm	Seats (Total: 20) Location: TBA

ENGL799 **Master's Thesis Research**

(Perm req) Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ENGL878 **Pedagogical Mentoring for Doctoral Students**

(Perm req) Credits: 1-3 Grading Method: Sat-Fail

Pedagogical mentoring by roster faculty members for graduate students teaching 200-level literature courses.

Contact department for information to register for this course.

ENGL879 **Professional Mentoring for Doctoral Students**

(Perm req) Credits: 1-3 Grading Method: Sat-Fail

Augments advising currently provided by the English Department Graduate Studies Office. Individual professional and career mentoring for PhD students from a faculty member.

Contact department for information to register for this course.

ENGL898 **Pre-Candidacy Research**

(Perm req) Credits: 1-8 Grading Method: Regular

Pedagogical mentoring by roster faculty members for graduate students teaching 200-level literature courses.

Contact department for information to register for this course.

ENGL899 **Doctoral Dissertation Research**

(Perm req) Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ENMA Engineering, Materials Spring 2019

ENMA289A **Bigger, Faster, Better: The Quest for Absolute Technology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS, SCIS

0101	Gottlieb Oehrlein	Seats (Total: 30)	
	TuTh 12:30pm - 1:45pm F 11:00am - 11:50am	CHE 2108 CHM 0119	Discussion

0102	Gottlieb Oehrlein TuTh 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 30) CHE 2108 CHM 0119	Discussion

ENMA300 **Introduction to Materials Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES100; and permission of ENGR-Materials Science & Engineering department. Corequisite: MATH241. Recommended: PHYS261 and PHYS260. Also offered as: ENME382. Credit only granted for: ENMA300 or ENME382.

Structure of materials, chemical composition, phase transformations, corrosion and mechanical properties of metals, ceramics, polymers and related materials. Materials selection in engineering applications.

0101	Liyang Dai-Hattrick MWF 9:00am - 9:50am	Seats (Total: 100) JMP 3201	
0201	Samuel Schwarm TuTh 9:30am - 10:45am	Seats (Total: 100) CHE 2110	
0401	Liyang Dai-Hattrick MWF 10:00am - 10:50am *For students majoring in Materials Science and Engineering.*	Seats (Total: 120) CHE 2110	

ENMA301 **Modern Materials Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA180; or students who have taken courses with comparable content may contact the department. And ENMA300; and permission of ENGR-Materials Science & Engineering department.

Five topical areas will be presented, each leading up to specific applications that have recently come to market or are currently experiencing heavy research and development. The goal of each module will be to introduce the basic materials science principles necessary to understand these new areas.

0101	Marina Leite TuTh 9:30am - 10:45am	Seats (Total: 46) SPH 1302	

ENMA312 **Experimental Methods in Materials Science**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA300. Corequisite: ENMA460. Restriction: Junior standing or higher.

Introduction to experimental methods in materials characterization; synthesis of colloidal nanoparticles; X-ray diffraction and light scattering; optical microscopy; thermal conductivity and expansion; electrical measurements; heat capacity; computational materials design.

0101	Audaldo Ponce	Seats (Total: 12)	
	Tu 8:00am - 9:15am	KEB 1135	
	W 9:00am - 11:50am	KEB 1135	Lab
0102	Audaldo Ponce	Seats (Total: 12)	
	Tu 8:00am - 9:15am	KEB 1135	
	M 9:00am - 11:50am	KEB 1135	Lab

ENMA414 **Introduction to Solid State Ionics**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENMA300; and permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA414 or ENMA489W. Formerly: ENMA489W.

Solid State Ionics is the study of point defects in crystalline and non-crystalline solids; defect equilibria and transport; the influence of chemical and electric potentials, interfaces, and association; and the application of ionically conducting solids in solid-state electrochemical transducer systems and devices.

0101	Eric Wachsman	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	EGL 1202

ENMA421 **Design of Composites**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA421 or ENMA489A. Formerly: ENMA489A.

Fundamentals of design, processing and selection composite materials fo structural applications will be covered. The topics include a review of all classes of materials, an in-depth analysis of micro and macro mechanical behavior including interactions at the two-phase interfaces, modeling of composite morphologies for optimal microstructures, material aspects, cost considerations, processing methods including consideration of chemical reactions and stability of the interfaces, and materials selection considerations.

0101	Sreeramamurthy Ankem	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	CHE 2136

ENMA425 **Introduction to Biomaterials**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: ENMA300. Restriction: Permission of ENGR-Materials Science & Engineering department. Credit only granted for: BIOE453, CHBE457, or ENMA425.

Examination of materials used in humans and other biological systems in terms of the relationships between structure, fundamental properties and functional behavior. Replacement materials such as implants, assistive devices such as insulin pumps and pacemakers, drug delivery systems, biosensors, engineered materials such as artificial skin and bone growth scaffolds, and biocompatibility will be covered.

0101	Peter Kofinas	Seats (Total: 10)
	MW 4:00pm - 5:15pm	AJC 2132

ENMA426 **Reliability of Materials**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA426 or ENMA489R. Formerly: ENMA489R.

Students are taught the basic degradation mechanisms of materials, through the understanding of the physics, chemistry, mechanics of such mechanisms. Mechanical failure mechanisms concentrate on fatigue, and creep. Chemical failure mechanisms emphasize corrosion and oxidation. Physical mechanisms such as diffusion, electromigration, defects and defect migration, surface trapping mechanisms, charge creation and migration are also included.

0101	Aristos Christou	Seats (Total: 25)
	MW 3:30pm - 4:45pm	CHM 1228

ENMA430 **Quantum Size Effects in Nanomaterials**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS431 or ENMA460; and (CHEM231 or CHEM481).

Surveys materials systems whose properties are governed by quantum mechanical phenomena. The time-independent Schrodinger equation is employed to relate materials structure and size to their electrical, thermal and optical properties. Integrated throughout the course are (1) surveys of approaches for the synthesis of the nanoscale structures (nanoparticles, nanowires, nanotubes, etc.), (2) computer-based exercises, (3) review of influential articles from the scientific literature, and (4) in-depth analysis of devices and applications that utilize the quantum materials.

0101	Oded Rabin	Seats (Total: 30)
	MWF 10:00am - 10:50am	JMP 2202

ENMA445 **Liquid Crystals and Structured Soft Materials**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH246, PHYS270, and PHYS271. Restriction: Permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA445 or ENMA489L. Formerly: ENMA489L.

Elective course on the properties and behavior of liquid crystals and related soft materials, and their relationship to biomaterials and to applications.

0101	Luz Martinez-Miranda	Seats (Total: 10)
	MW 5:00pm - 6:15pm	CHE 2145

ENMA460 **Physics of Solid Materials**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS271, PHYS270, and MATH241. Restriction: Junior standing or higher; and must be in Engineering: Materials Science program. Also offered as: PHYS431. Credit only granted for: ENMA460 or PHYS431.

Classes of materials; introduction to basic ideal and real materials' behavior including mechanical, electrical, thermal, magnetic and optical responses of materials; importance of microstructure in behavior. One application of each property will be discussed in detail.

0101	Jason Hattrick-simpers	Seats (Total: 20)
	MW 3:30pm - 4:45pm	PHY 1402

ENMA461 **Thermodynamics of Materials**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA300. Restriction: Junior standing or higher.

Thermodynamic aspects of materials; basic concepts and their application in design and processing of materials and systems. Topics include: energy, entropy, adiabatic and isothermal processes, internal and free energy, heat capacity, phase equilibria and surfaces and interfaces.

0101	Yifei Mo	Seats (Total: 45)
	TuTh 12:30pm - 1:45pm	CHE 2118

ENMA463 **Macroprocessing of Materials**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA300. Restriction: Junior standing or higher.

Processing of modern, bulk engineering materials. Raw materials, forming, firing, finishing and joining. More emphasis on metals and ceramics than polymers.

0101	Isabel Lloyd	Seats (Total: 25)
	TuTh 9:30am - 10:45am	CHE 2136

ENMA465 **Microprocessing Materials**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA300. Restriction: Permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA363, ENMA489B, or ENMA465. Formerly: ENMA363.

Micro and nanoscale processing of materials. Emphasis on thin film processing for advanced technologies.

0101	Gary Rubloff	Seats (Total: 55)
	MW 3:30pm - 4:45pm	ATL 2324

ENMA470 **Materials Selection for Engineering Design**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA300; and permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA 470 or ENMA 489O. Formerly: ENMA 489O.

Students will learn about materials classes, properties, limitations and applications and the methodology of materials selection in engineering design.

0101	Timothy Foecke	Seats (Total: 40)
	MWF 12:00pm - 12:50pm	PHY 1201

ENMA476 **Manufacturing: Materials Design and Systems Integration**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Engineering: Materials Science program.

The fundamentals of nanomanufacturing based on state-of-the-art and future prospects in materials design and systems integration. The course examines functional nanomaterials design and synthesis, structural assembly from nanoscale to macroscale, and device fabrication. Distinct from the current curricular paradigm in many nanotechnology programs that focus on underlying science, this course emphasizes the immediate need for scale-up, process robustness, and system integration issues. Featuring case studies from industry, end of chapter problems, and study questions, the course is for upper-level undergraduate and graduate students, who are interested in the future of manufacturing innovation and technology.

Permission of the department. (major code 09150).

0101	Liangbing Hu	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	EGR 1102

ENMA481 **Introduction to Electronic and Optical Materials**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENMA300; or students who have taken courses with comparable content may contact the department.

Electronic, optical and magnetic properties of materials. Emphasis on materials for advanced optoelectronic and magnetic devices and the relationship between properties and the processing/fabrication conditions.

0101	Ichiro Takeuchi	Seats (Total: 15)
	TuTh 5:00pm - 6:15pm	PHY 1219

ENMA486 **Seminar in Materials Science and Engineering**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Engineering: Materials Science program.

Current research in materials science and engineering and related fields. The lectures are presented by scientists and engineers from academia, national laboratory, US government, etc., in the format of seminars.

0101	Lourdes Salamanca-Riba, Manfred Wuttig	Seats (Total: 3)
	F 1:00pm - 2:30pm	CHE 2110

ENMA489T **Selected Topics in Engineering Materials; Accelerator Physics - Building the Maryland 5 MeV Cyclotron**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in materials science and engineering.

Prerequisite: PHYS270 and PHYS271; senior standing, and permission of department.

0101	Timothy Koeth	Seats (Total: 3)	
	TuTh 9:30am - 10:45am	CSI 3118	
	F 9:00am - 12:00pm	EGR 0312	Lab

ENMA489U **Selected Topics in Engineering Materials; Surfaces and Interfaces of Electronic Materials**

Credits: 3 Grading Method: Regular, Audit

Selected topics of current importance in materials science and engineering.

ENMA460 is encouraged as a prerequisite or co-requisite and permission of the department.

0101	Leonard Brillson	Seats (Total: 10)
	MW 5:00pm - 6:15pm	ATL 2324

ENMA490 **Materials Design**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ENMA487. Restriction: Senior standing.

Capstone design course. Students work in teams on projects evaluating a society or industry based materials problem and then design and evaluate a strategy to minimize or eliminate the problem; includes written and oral presentations.

Class meets in Clark Hall Innovation lab, Bay area 5 and 6.

0101	Raymond Phaneuf TuTh 3:30pm - 5:30pm	Seats (Total: 41) Location: TBA

ENMA496 **Processing and Engineering of Polymers**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENMA300; and permission of ENGR-Materials Science & Engineering department.

A comprehensive analysis of processing and engineering techniques for the conversion of polymeric materials into useful products. Evaluation of the performance of polymer processes, design of polymer processing equipment, effect of processing on the structure and properties of polymeric materials.

0101	Brian Pate MW 6:30pm - 7:45pm	Seats (Total: 25) CHE 2145

ENMA499 **Senior Laboratory Project**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Students work with a faculty member on an individual laboratory project in one or more of the areas of engineering materials. Students will design and carry out experiments, interpret data and prepare a comprehensive laboratory report.

0101	Yifei Mo Contact instructor or department for details.	Seats (Total: 5)

ENMA614 **Advanced Solid State Ionics**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA 614 or ENMA 698W. Formerly: ENMA 698W.

Advanced solid state ionics is the higher level study of point defects in crystalline and non-crystalline solids; defect equilibria and transport; the influence of chemical and electric potentials, interfaces, and association; and the application of ionically conducting solids in solid-state electrochemical transducer systems and devices.

0101	Eric Wachsman TuTh 11:00am - 12:15pm	Seats (Total: 15) EGL 1202

ENMA620 **Polymer Physics**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: ENMA471; or permission of instructor. Restriction: Permission of ENGR-Materials Science & Engineering department.

The thermodynamics, structure, morphology and properties of polymers. Developing an understanding of the relationships between theory and observed behavior in polymeric materials.

0101	Mohamad Al-Sheikhly	Seats (Total: 25)
	TuTh 5:00pm - 6:15pm	CHM 0119

ENMA621 **Advanced Design Composite Materials**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA621 or ENMA698A. Formerly: ENMA698A.

Fundamentals of design, processing, and selection of composite materials for structural applications are covered. The topics include a review of all classes of engineering materials, an in-depth analysis of micro and macro mechanical behavior including interactions at the two-phase interfaces, modeling of composite morphologies for optimal microstructures, material aspects, cost considerations, processing methods- including consideration of chemical reactions, stability of the interfaces and material selection.

0101	Sreeramamurthy Ankem	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	CHE 2136

ENMA645 **Advanced Liquid Crystals and Other Monomeric Soft Matter Materials**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of ENGR-Materials Science & Engineering department.

Elective course on the properties and behavior of liquid crystal and related soft materials, and their relationship to biomaterials and applications.

0101	Luz Martinez-Miranda	Seats (Total: 10)
	MW 5:00pm - 6:15pm	CHE 2145

ENMA661 **Kinetics of Reactions in Materials**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: ENMA660. Restriction: Permission of ENGR-Materials Science & Engineering department.

The theory of thermally activated processes in solids as applied to diffusion, nucleation and interface motion. Cooperative and diffusionless transformations. Applications selected from processes such as allotropic transformations, precipitation, martensite formation, solidification, ordering, and corrosion.

0101	Daniel Josell	Seats (Total: 28)
	TuTh 3:30pm - 4:45pm	CHE 2145

ENMA671 **Defects in Materials**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-Materials Science & Engineering department.

Fundamental aspects of point (electronic and atomic) defects, dislocations, and surfaces and interfaces in materials. Defect interactions, defect models, and effects of zero, one and two dimensional defects on material behavior.

0101	Lourdes Salamanca-Riba	Seats (Total: 25)
	MW 3:30pm - 4:45pm	JMP 1109

ENMA685 **Advanced Electrical and Optical Materials**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENMA685 or ENMA698F. Formerly: ENMA698F.

Students become familiar with basic and state of the art knowledge of some technologically relevent topics in materials engineering and applied physics, including dielectric/ferroelectric materials, magnetic materials, superconductors, multiferroic materials and optical materials with an underlying emphasis on the thin film and device fabrication technology. Fundamental physical properties and descriptions of different materials and their applications are included. Discussion will include new developments in the fields.

0101	Ichiro Takeuchi	Seats (Total: 5)
	TuTh 5:00pm - 6:15pm	PHY 1219

ENMA688 **Seminar in Materials Science and Engineering**

Credits: 1 Grading Method: Regular, Audit

Current research in materials science and engineering and related fields.

0101	Manfred Wuttig, Lourdes Salamanca-Riba	Seats (Total: 28)
	F 1:00pm - 2:30pm	CHE 2110

ENMA698 **Special Problems in Materials Science and Engineering**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Individual, supervised study in materials science and engineering.

Contact department for information to register for this course.

ENMA698U **Special Problems in Materials Science and Engineering; Surfaces and Interfaces of Electronic Materials**

Credits: 3 Grading Method: Regular, Audit

Individual, supervised study in materials science and engineering.

ENMA460 is encouraged as a prerequisite or co-requisite and permission of the department.

0101	Leonard Brillson	Seats (Total: 10)
	MW 5:00pm - 6:15pm	ATL 2324

ENMA797 **Independent Study**

Credits: 3 Grading Method: Regular, Audit

This course is designed to provide students with a directed independent study course in order to prepare the scholarly paper required for the master's degree without thesis degree option.

0101	Ichiro Takeuchi	Seats (Total: 6)
	Contact instructor or department for details.	

ENMA799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ENMA898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENMA899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ENME Engineering, Mechanical Spring 2019

ENME201 **Careers in Mechanical Engineering**

Credits: 1 Grading Method: Sat-Fail

The Mechanical Engineering Curriculum, Career Paths. Research areas in the Mechanical Engineering Department. The Mechanical Engineering Profession.

0101	Gary Pertmer Th 12:30pm - 1:30pm	Seats (Total: 60) JMP 3201	
0201	Gary Pertmer, La'Mon Johnson Class time/details on ELMs	Seats (Total: 15) ONLINE	

ENME202 **Computing Fundamentals for Engineers**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Corequisite: Must be concurrently enrolled in MATH141. Restriction: Permission of ENGR-Mechanical Engineering department. Credit only granted for: ENAE202 or ENME202.

Introduction to computational tools for the solution of engineering problems. C++ & MATLAB programming including branching and loops, functions, file handling, arrays, and data structures. Students will be introduced to object-oriented programming, basic computing, algorithms, and principles of software engineering.

0201	Don DeVoe TuTh 8:00am - 8:50am Th 3:00pm - 5:00pm	Seats (Total: 42) EGR 1202 KEB 2111	 Lab
0202	Don DeVoe TuTh 8:00am - 8:50am W 5:00pm - 7:00pm	Seats (Total: 42) EGR 1202 KEB 2111	 Lab
0203	Don DeVoe TuTh 8:00am - 8:50am F 11:00am - 1:00pm	Seats (Total: 42) EGR 1202 KEB 2111	 Lab

0204	Don DeVoe TuTh 8:00am - 8:50am W 4:00pm - 6:00pm	Seats (Total: 30) EGR 1202 KEB 2107	 Lab
0205	Don DeVoe TuTh 8:00am - 8:50am W 4:00pm - 6:00pm	Seats (Total: 30) EGR 1202 EGR 0312	 Lab

ENME208 **Introduction to Automotive Engineering and Design**

(Perm req)

Credits: 2 Grading Method: Regular

Selected concepts in automotive engineering and design at the introductory level utilizing the Terps Racing Baja SAE student project as a learning instrument. This class compliments ENME408, Automotive Design, which focuses on the Terps Racing Formula SAE car.

0101	Scott Schmidt Tu 6:30pm - 7:30pm Th 6:30pm - 8:30pm	Seats (Total: 10) JMP 1109 JMP 1109	

ENME272 **Introduction to Computer Aided Design**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES100; and must have completed or be concurrently enrolled in MATH141. Restriction: Permission of ENGR-Mechanical Engineering department. Credit only granted for: ENME 414 or ENME272.

Fundamentals of CAD, using solid modeling packages (Pro/E, SolidWorks, and Autodesk Inventor). Two and three dimensional drawing. Dimensioning and specifications. Introduction of CAD based analysis tools. Students will complete a design project.

0101	Mohammad Fazelpour M 8:00am - 9:50am	Seats (Total: 42) KEB 2111	
0201	Hesam Babahosseini W 8:00am - 9:50am	Seats (Total: 42) KEB 2111	
0301	Jason Fox F 8:00am - 9:50am	Seats (Total: 42) KEB 2111	

0401	Mohammad Fazelpour Th 8:00am - 9:50am	Seats (Total: 42) KEB 2111	
0501	Mohammad Fazelpour Tu 8:00am - 9:50am	Seats (Total: 42) KEB 2111	

ENME289P **Exploring Topics in Mechanical Engineering; Additive Manufacturing for Prosthetic Design**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Introductory Design Topics in the Field of Mechanical Engineering.

Prerequisite: Recommended ENME272 or cad experience.

0101	Angela Bryl W 5:00pm - 6:00pm M 5:00pm - 7:00pm	Seats (Total: 25) EGR 2154 EGR 1102	 Lab

ENME331 **Fluid Mechanics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES232 and ENES221. Also offered as: BIOE331. Credit only granted for: BIOE331 or ENME331.

Principles of fluid mechanics. Mass, momentum and energy conservation. Hydrostatics. Control volume analysis. Internal and external flow. Boundary layers. Modern measurement techniques. Computer analysis. Laboratory experiments.

0101	An Wang, Siddhartha Das MW 12:00pm - 12:50pm Th 3:00pm - 4:40pm	Seats (Total: 35) EGR 1202 JMP 1109	 Lab
0102	An Wang, Siddhartha Das MW 12:00pm - 12:50pm W 1:00pm - 2:50pm	Seats (Total: 35) EGR 1202 CHE 2118	 Lab
0103	An Wang, Siddhartha Das MW 12:00pm - 12:50pm Th 1:00pm - 2:50pm	Seats (Total: 35) EGR 1202 PHY 0405	 Lab

0104	Siddhartha Das, An Wang MW 12:00pm - 12:50pm W 3:00pm - 4:50pm	Seats (Total: 35) EGR 1202 JMP 2202	 Lab

ENME332 **Transfer Processes**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENME331.

The principles of heat transfer. Conduction in solids. Convection. Radiation. Modern measurement techniques. Computer analysis.

0101	Amir Riaz, Marino diMarzo MW 9:00am - 9:50am Tu 1:00pm - 2:50pm	Seats (Total: 35) KEY 0106 JMP 1202	 Lab
0102	Amir Riaz, Marino diMarzo MW 9:00am - 9:50am W 1:00pm - 2:50pm	Seats (Total: 35) KEY 0106 PHY 0405	 Lab
0103	Amir Riaz, Marino diMarzo MW 9:00am - 9:50am Th 1:00pm - 2:50pm	Seats (Total: 35) KEY 0106 JMP 1202	 Lab
0104	Marino diMarzo, Amir Riaz MW 9:00am - 9:50am M 1:00pm - 2:50pm	Seats (Total: 35) KEY 0106 CHE 2136	 Lab
0106	Amir Riaz, Marino diMarzo MW 9:00am - 9:50am F 1:00pm - 2:50pm	Seats (Total: 35) KEY 0106 PHY 1204	 Lab

ENME350 **Electronics and Instrumentation I**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: PHYS271 and PHYS270.

Modern instrumentation. Basic circuit design, standard microelectronic circuits. Digital data acquisition and control. Signal conditioning. Instrumentation interfacing. Designing and testing of analog circuits. Laboratory experiments.

0101	Jungho Kim, Xinan Liu MW 8:00am - 8:50am M 1:00pm - 2:50pm	Seats (Total: 40) EGR 1202 EGR 3108	 Lab
0102	Xinan Liu, Jungho Kim MW 8:00am - 8:50am Tu 3:30pm - 5:20pm	Seats (Total: 40) EGR 1202 EGR 3108	 Lab
0103	Xinan Liu, Jungho Kim MW 8:00am - 8:50am W 3:30pm - 5:20pm	Seats (Total: 40) EGR 1202 EGR 3108	 Lab
0104	Xinan Liu, Jungho Kim MW 8:00am - 8:50am Th 3:30pm - 5:20pm	Seats (Total: 40) EGR 1202 EGR 3108	 Lab

ENME351 **Electronics and Instrumentation II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS271, ENME350, and PHYS270.

Continuation of ENME 350. Modern instrumentation. Basic circuit design, standard microelectronic circuits. Digital data acquisition and control. Signal conditioning. Instrumentation interfacing. Designing and testing of analog circuits. Laboratory experiments.

0101	Steven Mitchell MW 10:00am - 10:50am M 3:30pm - 5:20pm	Seats (Total: 40) ESJ 0202 EGR 3108	 Lab
0102	Steven Mitchell MW 10:00am - 10:50am Th 1:00pm - 2:50pm	Seats (Total: 40) ESJ 0202 EGR 3108	 Lab
0103	Steven Mitchell MW 10:00am - 10:50am W 1:00pm - 2:50pm	Seats (Total: 40) ESJ 0202 EGR 3108	 Lab
0106	Steven Mitchell MW 10:00am - 10:50am Tu 1:00pm - 2:50pm	Seats (Total: 40) ESJ 0202 EGR 3108	 Lab

0107	Steven Mitchell MW 10:00am - 10:50am F 1:00pm - 2:50pm	Seats (Total: 36) ESJ 0202 EGR 3108	 Lab

ENME361 **Vibration, Controls and Optimization I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220, ENES221, and MATH246; and (MATH206 or ENME202). Restriction: Must be in Engineering: Mechanical program.

Fundamentals of vibration, controls and optimization. Analysis and design in time, Laplace and frequency domains. Mathematical description of system response, system stability, control and optimization. Optimal design of mechanical systems.

0101	Amr Baz TuTh 9:30am - 10:45am	Seats (Total: 120) JMP 3201	
0301	Yancy Diaz-Mercado TuTh 9:30am - 10:45am	Seats (Total: 75) MCB 1207	

ENME371 **Product Engineering and Manufacturing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES221; and (ENME392 or STAT400). Restriction: Must be in Engineering: Mechanical program.

Business aspects of engineering product development. Relationship of design and manufacturing. Product specification. Statistical process control. Design team development. The development process.

0201	Vincent Nguyen MW 11:00am - 11:50am W 4:00pm - 5:50pm	Seats (Total: 35) EGR 1202 EGL 0101	 Lab
0202	Vincent Nguyen MW 11:00am - 11:50am Th 3:00pm - 4:50pm	Seats (Total: 35) EGR 1202 EGL 0101	 Lab
0203	Vincent Nguyen MW 11:00am - 11:50am F 9:00am - 10:50am	Seats (Total: 35) EGR 1202 EGL 0101	 Lab

0204	Vincent Nguyen MW 11:00am - 11:50am Th 5:00pm - 6:50pm	Seats (Total: 35) EGR 1202 EGL 0101	 Lab
0205	Vincent Nguyen MW 11:00am - 11:50am Th 7:00pm - 8:50pm	Seats (Total: 35) EGR 1202 EGL 0101	 Lab

ENME382 **Introduction to Materials Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES100; and permission of ENGR-Mechanical Engineering department. Corequisite: MATH241. Recommended: PHYS261 and PHYS260. Also offered as: ENMA300. Credit only granted for: ENMA300 or ENME382.

Structure of materials, chemical composition, phase transformations, corrosion and mechanical properties of metals, ceramics, polymers and related materials. Materials selection in engineering applications.

0101	Liyang Dai-Hattrick MWF 9:00am - 9:50am	Seats (Total: 100) JMP 3201
0201	Samuel Schwarm TuTh 9:30am - 10:45am	Seats (Total: 100) CHE 2110

ENME392 **Statistical Methods for Product and Processes Development**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH241.

Integrated statistical methodology for the improvement of products and processes in terms of performance, quality and cost. Designed experimentation. Statistical process control. Software application. Laboratory activities.

0101	Mark Fuge TuTh 11:00am - 12:15pm	Seats (Total: 120) JMP 3201
0201	Michel Cukier TuTh 11:00am - 12:15pm	Seats (Total: 80) KEB 1110

ENME400 **Machine Design**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in ENME361. Restriction: Permission of ENGR-Mechanical Engineering department.

Design of mechanical elements and planar machines. Failure theories. Design of pressure vessels, joints, rotating elements, and transmission elements. Kinematic structures, graphical, analytical, and numerical analysis and synthesis of linkages, gear trains, and flywheels are covered.

0101	Chandrasekhar Thamire TuTh 3:30pm - 4:20pm F 1:00pm - 2:50pm	Seats (Total: 75) BPS 1250 CSI 2117	 Discussion
0102	Chandrasekhar Thamire TuTh 3:30pm - 4:20pm F 10:00am - 11:50am	Seats (Total: 70) BPS 1250 CSI 2117	 Discussion

ENME406 **Roller Coaster Engineering**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220, ENES221, and ENME272. And ENME202; or MATH206. Corequisite: ENME400. Restriction: Permission of ENGR-Mechanical Engineering department.

Engineering of roller coasters including: specifications, concept creation, structural design, car design, and safety. Course covers biomechanics and rider kinematics as well as manufacturing aspects.

0101	Chandrasekhar Thamire TuTh 2:00pm - 3:15pm	Seats (Total: 35) ITV 1111	

ENME408 **Selected Topics in Engineering Design; Automotive Design**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Creativity and innovation in design. Generalized performance analysis, reliability and optimization as applied to the design of components and engineering systems. Use of computers in design of multivariable systems.

Restriction: Must be in Engineering: Mechanical program; and senior standing. Or permission of ENGR-Mechanical Engineering department. Repeatable to 6 credits if content differs. Creativity and innovation in design. Generalized performance analysis, reliability and optimization as applied to the design of components and engineering systems. Use of computers in design of multivariable systems.

0101	Leonard Hamilton	Seats (Total: 50)
	MW 5:00pm - 6:15pm	CHE 2110

ENME421 **Engineering Design Ideation**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in ENME371. Restriction: Junior standing or higher. Additional information: Ideally, this course should be taken prior to capstone design.

Engineering Design Methods is a technical elective for engineering students who wish to improve their ability to produce design ideas (i.e., the ideation process) for further development into conceptual ideas. Ideation is the creative, idea generation activity that happens at the beginning of the conceptual design process. Ideation methods are often built around creativity improving strategies and are often designed for individual use prior to presenting the results in a team setting.

0101	Linda Schmidt	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	EGR 3106

ENME424 **Urban Microclimate and Energy**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in ENME332. Recommended: ENME423. Restriction: Permission of ENGR-Mechanical Engineering department. Credit only granted for: ENME424 or ENME808I.

Urban microclimate from the perspective of transient heat and mass transfer using building energy simulations for building clusters as well as LEED building certification criteria. The focus is on understanding building energy consumption and environmental impacts from the individual building scale to a neighborhood scale.

0101	Jelena Srebric	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	EGR 1102

ENME427 **CSI Mechanical: Finding Reasons for Compromised Structural Integity**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES220 and ENME382. Restriction: Permission of ENGR-Mechanical Engineering department.

Understanding the causes of product failures including the political, societal, economic, environmental, and ethical impact of these failures, and the strategies to avoid, postpone, or mitigate them. Students will be encouraged to combine concepts from engineering, natural sciences, social sciences, and the humanities to address these complex issues. Basics of failure analysis, forensics, and reliability engineering and the scientific fundamentals underlying the most common types of failure. Issues of legal liability. Methods for monitoring the existing condition of a structure.

0101	Patrick McCluskey	Seats (Total: 55)
	MW 3:30pm - 4:45pm	PHY 1204

ENME431 **Nuclear Reactor Systems and Safety**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH246. Recommended: ENME430. Restriction: Permission of ENGR-Mechanical Engineering department.

Engineering, material and thermal aspects of light water reactors, fast reactors, high temperature gas reactors, heavy water moderated reactors, breeder reactors, advanced reactors including GEN IV designs. Evolution of light water reactor safety and regulation in the US that has culminated in the current body of regulations.

0101	Robert Sanders	Seats (Total: 35)
	MW 2:00pm - 3:15pm	JMP 2121

ENME436 **Renewable Energy**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENME331. Restriction: Must be in a major within the ENGR-Mechanical Engineering department. Credit only granted for: ENME489K or ENME436. Formerly: ENME489K.

Fundamentals, design/analysis tools, and state of the art renewable energy technologies. Energy resources and global perspectives of current and future energy demand/consumption trends, followed by prime renewable energy technologies, including wind, solar, hydro, geothermal, and ocean thermal energy conversion. Economics of renewable energy, energy conservation opportunities, CO2 capture and storage, and thermal energy storage.

0101	Billy Champion	Seats (Total: 40)
	MW 6:30pm - 7:45pm	EGR 1108

ENME461 **Control Systems Laboratory**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENME351 and ENME361. Restriction: Permission of ENGR-Mechanical Engineering department. Credit only granted for: ENEE461 or ENME461.

Students will design, implement, and test controllers for a variety of systems. This will enhance their understanding of feedback control familiarize them with the characteristics and limitations of real control devices. Students will also complete a small project. This will entail writing a proposal, purchasing parts for their controller, building the system, testing it, and writing a final report describing what they have done.

Also offered as ENEE461. Credit offered for ENME461 or ENEE461.

0101	William Levine MW 9:00am - 9:50am M 1:00pm - 3:50pm	Seats (Total: 14) KEB 1110 KEB 3209	 Lab
0102	William Levine MW 9:00am - 9:50am W 1:00pm - 3:50pm	Seats (Total: 14) KEB 1110 KEB 3209	 Lab
0103	William Levine MW 9:00am - 9:50am F 9:00am - 11:50am	Seats (Total: 14) KEB 1110 KEB 3209	 Lab
0104	William Levine MW 9:00am - 9:50am W 10:00am - 12:50pm	Seats (Total: 14) KEB 1110 KEB 3209	 Lab

ENME462 **Vibrations, Controls, and Optimization II**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENME351 and ENME361.

Continuation of ENME 361. Fundamentals of vibration, controls, and optimization. Analysis and design in time, Laplace and frequency domains. Mathematical descriptions of system response, system stability, control and optimization. Optimal design of mechanical systems.

0101	Jin-Oh Hahn, Munther Hassouneh MW 10:00am - 10:50am W 11:00am - 12:50pm	Seats (Total: 30) HJP 0226 KEB 2107	 Discussion

0102	Jin-Oh Hahn, Munther Hassouneh MW 10:00am - 10:50am Th 1:00pm - 2:50pm	Seats (Total: 42) HJP 0226 KEB 2111	Discussion
0103	Munther Hassouneh, Jin-Oh Hahn MW 10:00am - 10:50am F 1:00pm - 2:50pm	Seats (Total: 42) HJP 0226 KEB 2111	Discussion
0104	Munther Hassouneh, Jin-Oh Hahn MW 10:00am - 10:50am W 8:00am - 9:50am	Seats (Total: 40) HJP 0226 EGR 0312	Discussion
0105	Munther Hassouneh, Jin-Oh Hahn MW 10:00am - 10:50am W 11:00am - 12:50pm	Seats (Total: 30) HJP 0226 EGR 0312	Discussion

ENME464 **Cost Analysis for Engineers**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENME392; or students who have taken courses with comparable content may contact the department. Restriction: Permission of ENGR-Mechanical Engineering department.

An introduction to the financial and cost analysis aspects of product engineering. Introduces key elements of traditional engineering economics including interest, present worth, depreciation, taxes, inflation, financial statement analysis, and return on investment. Provides an introduction to cost modeling as it applies to product manufacturing and support. Cost modeling topics will include: manufacturing cost analysis, life-cycle cost modeling (reliability and warranty), and cost of ownership.

0101	Peter Sandborn TuTh 2:00pm - 3:15pm	Seats (Total: 90) JMP 3201

ENME465 **Probability-Based Design**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH206 and ENME392. Restriction: Permission of ENGR-Mechanical Engineering department.

Review of probabilistic distributions, introduction to pseudo-random number generation, and algorithms to produce probability distributions using Monte Carlo simulation via Matlab and other approaches to best design probabilistic engineering problems.

0101	Steven Gabriel MW 3:30pm - 4:45pm	Seats (Total: 30) EGR 1104	

ENME466 **Lean Six Sigma**

(Perm req)

Credits: 3 Grading Method: Regular

Corequisite: ENME392; or students who have taken courses with comparable content may contact the department. Restriction: Permission of ENGR-Mechanical Engineering department.

This course intends to provide in-depth understanding of Lean Six Sigma and its Define - Mearsure - Analyze - Improve - Control (DMAIC) Breakthrough Improvement Strategy. The emphasis is placed on the DMAIC process which is reinforced via application of semester long corporate projects and case study analysis.

0101	David Bigio TuTh 3:30pm - 4:45pm	Seats (Total: 40) EGR 0135	

ENME470 **Finite Element Analysis**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Senior standing; and permission of ENGR-Mechanical Engineering department.

Basic concepts of the theory of the finite element method. Applications in solid mechanics and heat transfer.

0101	Peter Chung MW 12:00pm - 1:15pm	Seats (Total: 42) KEB 2111	

ENME472 **Integrated Product and Process Development**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: CS

Prerequisite: ENME371.

Integration of product development with the development process. Design strategies. Product architecture. Design for manufacturing. Selection of materials. Design for assembly.

0101	Aris Cleanthous Tu 12:00pm - 1:50pm TuTh 11:00am - 11:50am	Seats (Total: 36) EGL 0101 EGR 1202	 Discussion

0201	Hugh Bruck W 12:00pm - 1:50pm TuTh 11:00am - 11:50am	Seats (Total: 36) EGL 0101 EGR 1202	Discussion
0301	Aris Cleanthous Th 12:00pm - 1:50pm TuTh 11:00am - 11:50am	Seats (Total: 36) EGL 0101 EGR 1202	Discussion
0401	Vincent Nguyen F 11:00am - 12:50pm TuTh 11:00am - 11:50am	Seats (Total: 36) EGL 0101 EGR 1202	Discussion
0601	Gary Pertmer W 6:00pm - 7:50pm TuTh 11:00am - 11:50am	Seats (Total: 36) EGL 0101 EGR 1202	Discussion

ENME488 **Special Problems**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced problems in mechanical engineering with special emphasis on mathematical and experimental methods.

Limited to mechanical engineering seniors.

Contact department for information to register for this course.

ENME489 **Special Topics in Mechanical Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Contact department for information to register for this course.

ENME489D **Special Topics in Mechanical Engineering; Flight Dynamics and Simulation**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Prerequisite: ENME489F.

0201	David Findlay	Seats (Total: 6)
	Tu 3:30pm - 6:10pm	JMP 2120

ENME489J **Special Topics in Mechanical Engineering; Fatigue Life Prediction**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Contact department for information to register for this course.

ENME489L **Special Topics in Mechanical Engineering; Bio-Inspired Robotics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Pre- or corequisite: ENME351 and permission of department.

0101	Axel Krieger	Seats (Total: 34)
	MW 3:30pm - 4:45pm	EGR 2154

ENME489Q **Special Topics in Mechanical Engineering; Managing for Innovation and Quality**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Department permission required.

0101	Senthil Arul	Seats (Total: 30)
	TuTh 5:00pm - 6:15pm	AJC 2134

ENME489T **Special Topics in Mechanical Engineering; Nuclear Reactor Design**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

0101	Robert Sanders	Seats (Total: 15)
	MW 11:00am - 12:15pm	EGR 1104

ENME489Y **Special Topics in Mechanical Engineering; Remote Sensing**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Prerequisite: ENME351.

0101	Steven Mitchell TuTh 9:30am - 10:45am	Seats (Total: 65) ATL 2400

ENME600 **Engineering Design Methods**

Credits: 3

Grading Method: Regular, Audit

An introductory graduate level course in critical thinking about formal methods for design in Mechanical Engineering. Course participants gain background on these methods and the creative potential each offers to designers. Participants will formulate, present, and discuss their own opinions on the value and appropriate use of design materials for mechanical engineering.

0101	Linda Schmidt W 4:00pm - 6:40pm	Seats (Total: 25) JMP 2222
ER01	Linda Schmidt Class time/details on ELMs	Seats (Total: 7) ONLINE
RE01	Linda Schmidt Class time/details on ELMs	Seats (Total: 5) ONLINE
SG01	Linda Schmidt W 4:00pm - 6:40pm	Seats (Total: 2) Location: TBA
SM01	Linda Schmidt W 4:00pm - 6:40pm	Seats (Total: 2) Location: TBA

ENME607 **Engineering Decision Making and Risk Management**

Credits: 3

Grading Method: Regular, Audit

Also offered as: ENRE671. Credit only granted for: ENME808X, ENRE671 or ENME607. Formerly: ENME 808X.

Individual decision-making, group decisionmaking, and organizations of decision-makers in the context of engineering design, project management, and other functions. Techniques for making better decisions, for understanding how decisions are related to each other, and for managing risk.

Also offered as ENRE671. Credit granted for ENME607 or ENRE671.

0101	Jeffrey Herrmann TuTh 2:00pm - 3:15pm	Seats (Total: 30) JMP 2222
ER01	Jeffrey Herrmann Class time/details on ELMs	Seats (Total: 15) ONLINE
RE01	Jeffrey Herrmann Class time/details on ELMs	Seats (Total: 10) ONLINE

ENME625 **Multidisciplinary Optimization**

Credits: 3 Grading Method: Regular, Audit

Overview of single- and multi-level design optimization concepts and techniques with emphasis on multidisciplinary engineering design problems. Topics include single and multilevel optimality conditions, hierarchic and nonhierarchic modes and multilevel post optimality sensitivity analysis. Students are expected to work on a semester-long project.

0101	Shapour Azarm Tu 4:00pm - 6:40pm	Seats (Total: 30) CHM 1224

ENME633 **Molecular Thermodynamics**

Credits: 3 Grading Method: Regular, Audit

An examination of the interactions between molecules, which govern thermodynamics relevant to engineering, will be conducted. We will investigate both classical and statistical approaches to thermodynamics for understanding topics such as phase change, wetting of surfaces, chemical reactions, adsorption, and electrochemical processes. Statistical approaches and molecular simulation tools will be studied to understand how molecular analysis can be translated to macroscopic phenomena.

0101	Bao Yang TuTh 2:00pm - 3:15pm	Seats (Total: 25) CHE 2145

ENME635 **Energy Systems Analysis**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENPM635 or ENME635.

Rankine cycles with nonazeotropic working fluid mixtures, two-, multi- and variable-stage absorption cycles and vapor compression cycles with solution circuits. Power generation cycles with working fluid mixtures. Development of rules for finding all possible cycles suiting a given application or the selection of the best alternatives.

0101	Yunho Hwang Tu 4:00pm - 6:40pm	Seats (Total: 25) JMP 2222
ME01	Yunho Hwang Tu 4:00pm - 6:40pm	Seats (Total: 15) ONLINE

ENME641 **Viscous Flow**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENME640; or students who have taken courses with comparable content may contact the department; or permission of instructor. Formerly: ENME652.

Fluid flows where viscous effects play a significant role. Examples of steady and unsteady flows with exact solutions to the Navier-Stokes equations. Boundary layer theory. Stability of laminar flows and their transition to turbulence.

0101	Amir Riaz MW 5:00pm - 6:15pm	Seats (Total: 25) EGR 1108

ENME665 **Advanced Topics in Vibrations**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENME662; and permission of instructor.

Nonlinear oscillations and dynamics of mechanical and structural systems. Classical methods, geometrical, computational and analytical methods. Birfurcations of equillibrium and periodic solutions; chaos.

0101	B Balachandran TuTh 3:30pm - 4:45pm	Seats (Total: 25) EGR 3114

ENME684 **Modeling Material Behavior**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: ENME670; or permission of instructor.

Constitutive equations for the response of solids to loads, heat, etc. based on the balance laws, frame invariance, and the application of thermodynamics to solids. Non-linear elasticity with heat conduction and dissipation. Linear and non-linear non-isothermal viscoelasticity with the elastic-viscoelastic correspondence principle. Classical plasticity and current viscoplasticity using internal state variables. Maxwell equal areas rule, phase change, and metastability and stability of equilibrium states. Boundary value problems. Introduction to current research areas.

0101	Abhijit Dasgupta MW 2:00pm - 3:15pm	Seats (Total: 25) PHY 4221

ENME695 **Design for Reliability**

Credits: 3

Grading Method: Regular, Audit

Reliability is the ability of a product or system to perform as intended (i.e., without failure and within specified performance limits) for a specified time, in its life-cycle conditions. Knowledge of reliability concepts and principles, as well as risk assessment, mitigation and management strategies prepares engineers to contribute effectively to product development and life cycle management. This course teaches the fundamental knowledge and skills in reliability as it pertains to the design, manufacture, and use of electrical, mechanical, and electro-mechanical products. Topics cover the suitability of the supply chain members to contribute towards development, manufacturing, distribution and support of reliable products; efficient and cost-effective design and manufacture of reliable products; process capability and process control; derating, uprating, FMMEA, reliability prediction and reliability allocation; how to plan and implement product testing to assess reliability; how to analyze degradation, failure, and return data to estimate fundamental reliability parameters; root cause analysis; and reliability issues associated with warranties, regulatory requirements, and liabilities.

0101	Diganta Das, Michael Pecht M 9:30am - 12:10pm	Seats (Total: 29) JMP 2217
ER01	Michael Pecht, Diganta Das Class time/details on ELMs	Seats (Total: 20) ONLINE
RE01	Diganta Das, Michael Pecht Class time/details on ELMs	Seats (Total: 20) ONLINE

ENME711 **Vibration Damping**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: ENME662; or students who have taken courses with comparable content may contact the department. Recommended: Completion of coursework or background in Vibrations recommended. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering.

This course aims at introducing the different damping models that describe the behavior of viscoelastic materials. Emphasis will be placedon m odeling the dynamics of simple structures (beams, plates & shells) with Passive Constrained Layer Damping (PCLD). Considerations will also be g iven to other types of surface treatments such as Magnetic Constrained Layer Damping (MCLD), Shunted Network Constrained Layer Damping (SNCLD),Active Constrained Layer Damping (ACLD) and Electrorheological Constrained Layer Damping (ECLD). Energy dissipation characteristics of the damp ing treatments will be presented analytically & by using the modal strain energy approach as applied to finite element models of vibrating structures.

0101	Amr Baz	Seats (Total: 25)
	MW 5:00pm - 6:15pm	EGR 1104

ENME742 **Urban Microclimate and Energy**

Credits: 3 Grading Method: Regular, Audit

Also offered as: ENME424. Credit only granted for: ENME808I, ENME424 or ENME742. Formerly: ENME808I.

Examines urban microclimate from the perspective of transient heat and mass transfer using building energy simulations for building clusters. The focus is on understandingbuilding energy consumption and environmental impacts from the individual building scale (~100) to a neighborhood scale (~103). Emerging morphological properties of building clustersmodulate transient convective and radiative heat transfer resulting in different localmicroclimatic conditions. At the neighborhood scale, these conditions are analyzed using heatand mass transfer simulations in building clusters to provide boundary conditions for transient building energy simulations. At the individual building scale, besides the energy consumption,this course examines connection between indoor and outdoor environments.

0101	Jelena Srebric	Seats (Total: 3)
	TuTh 2:00pm - 3:15pm	EGR 1102

ENME744 **Additive Manufacturing**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENME272 and ENME331; or students who have taken courses with comparable content may contact the department. Also offered as: ENME416. Credit only granted for: ENME 416 OR ENME 744.

Develop a comprehensive understanding of fundamental additive manufacturing-alternatively, "three-dimensional (3D) printing-approaches, including extrusion-based deposition, stereolithography, powder bed-based melting, and inkjet-based deposition. Cultivate a "design-for-additive manufacturing" skill set for combining computer-aided design (CAD) and computer-aided manufacturing (CAM) methodologies to produce successful 3D prints. Fabricate 3D mechanical objects using a variety of 3D printing technologies on campus. Execute a design project that demonstrates how additive manufacturing technologies can overcome critical limitations of traditional manufacturing processes.

0101	Ryan Sochol MWF 1:00pm - 1:50pm	Seats (Total: 20) JMP 2222
DE01	Ryan Sochol Class time/details on ELMs	Seats (Total: 20) ONLINE

ENME799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ENME808 **Advanced Topics in Mechanical Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

ENME808E **Advanced Topics in Mechanical Engineering; Machine Learning: Theory and Applications**

Credits: 3 Grading Method: Regular, Audit

0101	Nikhil Chopra TuTh 11:00am - 12:15pm	Seats (Total: 20) EGR 2154

ENME808Z **Advanced Topics in Mechanical Engineering; Fundamentals of Optics and Optical Systems for Engineers**

Credits: 2-3 Grading Method: Regular, Audit

0101	Bongtae Han MW 3:30pm - 4:45pm	Seats (Total: 20) PLS 1176

ENME898 **Pre-Candidacy Research**

(Perm req) Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENME899 **Doctoral Dissertation Research**

(Perm req) Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ENPM Engineering, Professional Masters Spring 2019

ENPM601 **Analog and Digital Communication Systems**

(Perm req) Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENPM600; or students who have taken courses with comparable content may contact the department. And permission of ENGR-CDL-Office of Advanced Engineering Education.

Analog modulation methods including AM, DSBSC-AM, SSB, and QAM; effects of noise in analog modulation systems. Digital communication methods for the infinite bandwidth additive white Gaussian noise channel: PAM, QAM, PSK, FSK modulation; optimum receivers using the MAP principle; phase-locked loops; error probabilities. Digital communication over bandlimited channels: intersymbol interference and Nyquist's criterion, adaptive equalizers, symbol clock and carrier recovery systems, trellis coding. Spread spectrum systems: direct sequence modulation and frequency hopping.

0101	Sasan Haghani Tu 7:00pm - 9:40pm	Seats (Total: 17) JMP 2120
SG01	Sasan Haghani Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Sasan Haghani Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM602 **Data Networks**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE324; or students who have taken courses with comparable content may contact the department.

Principles of network design, circuit switching and packet switching, OSI Reference Model; parity and cyclic redundancy check codes; retransmission request protocols; Markov chains and queuing models for delay analysis; multiaccess communication, local area networks, Ethernet and Token Ring standards; routing, flow control, internetworking; higher layer functions and protocols. Software tools for network simulation and performance analysis will be used.

0101	C Ravishankar M 7:00pm - 9:40pm	Seats (Total: 17) JMP 2120
SG01	C Ravishankar M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	C Ravishankar M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM610 **Digital VLSI Design**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed undergraduate courses in solid state devices and digital/analog circuit design.

VLSI design with emphasis on CMOS technology. Logic functions using CMOS switches; MOSFET characteristics; BiCMOS, dynamic logic and domino logic structures; PLA's, FPLA's, and gate arrays; layout via MAGIC, use of VHDL, IRSIM, and Spice; design rules and verification techniques; packaging techniques; chip design options: standard cells, sea-of-gates, full custom; design capture and verification tools; design of CMOS datapaths, memory, and control; possible fabrication via MOSIS.

0101	Manoj Franklin W 7:00pm - 9:40pm	Seats (Total: 17) JMP 2216
SG01	Manoj Franklin W 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Manoj Franklin W 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM611 **Software Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Competency in one programming language; and must have completed an undergraduate software engineering course. Or permission of instructor. Restriction: Permission of ENGR-CDL-Office of Advanced Engineering Education.

Software engineering concepts, methods, and practices important to both the theorist and the practitioner will be covered. The entire range of responsibilities expected of a software engineer are presented. The fundamental areas of requirements development, software design, programming languages, and testing are covered extensively. Sessions on supporting areas such as systems engineering, project management, and software estimation are also included.

DE01	Christopher Ackermann Class time/details on ELMs	Seats (Total: 20) ONLINE

ENPM612 **System and Software Requirements**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENPM611. Restriction: Permission of ENGR-CDL-Office of Advanced Engineering Education.

Focus will be placed on the theoretical and practical aspects of requirements development. Students will recognize the place of requirements, how to work with users, requirements methods and techniques, the various requirements types, how to set requirements development schedules, requirements evolution, how to model and prototype requirements, how to evaluate and manage risk in requirements, techniques to test requirements, how to manage the requirements process, and how to write an effective requirements document.

0101	Mikael Lindvall, Ioana Rus Tu 7:00pm - 9:40pm	Seats (Total: 35) JMP 2216
DE01	Mikael Lindvall, Ioana Rus Class time/details on ELMs	Seats (Total: 10) ONLINE
SG01	Mikael Lindvall, Ioana Rus Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Ioana Rus, Mikael Lindvall Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM614 **Software Testing & Maintenence**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENPM611. Restriction: Permission of ENGR-CDL-Office of Advanced Engineering Education.

Aspects of software development after coding is completed will be covered. Students will understand the various levels of testing, techniques for creating test data, how to manage test cases and scenarios, testing strategies and methods, testing batch, client/server, real-time, and Internet systems, and the development of an effective test plan. Software maintenance will include the creation of easily maintained software; preventive maintenance, corrective maintenance, and enhancements; configuration management practices; and assuring quality in software manintenance.

0101	Mikael Lindvall, Anumeet Nepaul Th 7:00pm - 9:40pm	Seats (Total: 35) JMP 2216
DE01	Anumeet Nepaul, Mikael Lindvall Class time/details on ELMs	Seats (Total: 10) ONLINE
SG01	Mikael Lindvall, Anumeet Nepaul Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Mikael Lindvall, Anumeet Nepaul Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM615 **Embedded Systems**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed undergraduate courses in logic design, computer architecture, and programming.

Introduction to embedded systems design and evaluation: requirements, specification, architecture, hardware and software components, integration and performance evaluation. Topics include instruction sets, CPU, embedded computing platform, program design and analysis, operating systems, hardware accelators, multiprocessors, networks, and system analysis. Real-life embedded systems design examples will be used throughput the course to illustrate these concepts.

0101	Gang Qu W 4:00pm - 6:40pm	Seats (Total: 30) JMP 2216
SG01	Gang Qu W 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Gang Qu W 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM616 **Wireless Communications: Concepts and Technologies**

Credits: 3 Grading Method: Regular, Audit

Advanced topics in wireless communications for voice, data, and multimedia. Overview of current wireless systems and standards followed by characterizing the wireless channel, including path loss for different environments, random log-normal shadowing due to signal attenuation, and the flat and frequency-selective properties of multipath fading. Fundamental capacity limits of wireless channels and the characteristics of the capacity-achieving transmission strategies. Overview of wireless networks, including multiple and random access techniques, WLANs, cellular system design, and ad-hoc network design. Applications for these systems, including the evolution of cell phones and PDAs, smart homes and appliances, sensor networks, and automated highways and skyways.

0101	Kamran Etemad M 4:00pm - 6:40pm	Seats (Total: 30) JMP 2222
SG01	Kamran Etemad M 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Kamran Etemad M 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM650 **Solar Thermal Energy Systems**

Credits: 3 Grading Method: Regular, Audit

Covers a review of related fundamentals, including limitations imposed by thermodynamics, solar spectral characteristics, measurement, and analytical models to predict solar irradiance with respect to time, location and orientation. The course will then examine the characteristics of various components in solar thermal systems with particular emphasis on flat plate and concentrating collectors, fixed and tracking collector systems, heat exchangers and thermal storage to understand how they work and how their performance is influenced by their design. The course will then lead to an examination of systems and system performance, including system design, predicted energy savings and related economics. The course will introduce low temperature applications such as solar hot water, space heating and water distillation, as well as concentrating solar energy for solar thermo-chemical processes to produce hydrogen and solar power generation systems. A project of importance to the development of Solar Thermal Power Systems will be assigned.

0101	Brian Valentine Tu 7:00pm - 9:40pm	Seats (Total: 20) JMP 2217
ME01	Brian Valentine Class time/details on ELMs	Seats (Total: 20) ONLINE

SG01	Brian Valentine Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Brian Valentine Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM651 **Heat Transfer for Modern Application**

Credits: 3 Grading Method: Regular, Audit

The applications selected will vary widely: from cooling of electronics to prevention of fog and stalagmite formation in ice rinks. Multi-mode (i.e. simultaneous conduction, convection, radiation, mass transfer) problems will be emphasized. Lectures on basic principles, followed by assignments in which students formulate solutions and explain results.

0101	Yunho Hwang M 4:00pm - 6:40pm	Seats (Total: 17) JMP 2120
ME01	Yunho Hwang Class time/details on ELMs	Seats (Total: 20) ONLINE
SG01	Yunho Hwang M 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Yunho Hwang M 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM656 **Energy Conversion II -- Mobile Power**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed undergraduate courses in thermodynamics, heat transfer, and fluid mechanics; or ENPM672.

Presents the scientific and engineering basis for design, manufacture, and operation of thermal conversion technologies utilized for mobility power generation. The interface between fuel combustion chemistry and generated power are addressed. The practical aspects of design and operation of various alternatives for power are compared. The impact of choices with regard to power and fuel alternatives as well as air pollution potential are also considered.

0101	Sahil Popli Th 7:00pm - 9:40pm	Seats (Total: 20) JMP 2217

ME01	Sahil Popli Class time/details on ELMs	Seats (Total: 20) ONLINE
SG01	Sahil Popli Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Sahil Popli Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM661 **Planning for Autonomous Robots**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENPM661 or ENPM808C. Formerly: ENPM808C.

Planning is a fundamental capability needed to realize autonomous robots. Planning in the context of autonomous robots is carried out at multiple different levels. At the top level, task planning is performed to identify and sequence the tasks needed to meet mission requirements. At the next level, planning is performed to determine a sequence of motion goals that satisfy individual task goals and constraints. Finally, at the lowest level, trajectory planning is performed to determine actuator actions to realize the motion goals. Different algorithms are used to achieve planning at different levels. This graduate course will introduce planning techniques for realizing autonomous robots. In addition to covering traditional motion planning techniques, this course will emphasize the role of physics in the planning process. This course will also discuss how the planning component is integrated with control component. Mobile robots will be used as examples to illustrate the concepts during this course. However, techniques introduced in the course will be equally applicable to robot manipulators.

0101	Reza Monfaredi Tu 1:00pm - 3:40pm	Seats (Total: 52) JMP 2121
0201	Reza Monfaredi Tu 4:00pm - 6:40pm	Seats (Total: 52) JMP 3201
FL01	Reza Monfaredi Tu 4:00pm - 6:40pm *This section is for NAVAIR Cohort students located outside of Maryland ONLY*	Seats (Total: 5) Location: TBA
SG01	Reza Monfaredi Tu 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Reza Monfaredi Tu 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM671 **Advanced Mechanics of Materials**

Credits: 3 Grading Method: Regular, Audit

Formulate and quantitatively state the mechanical/physical responses of structural components and configurations subjected to loads, temperature, pre-strains etc. The two methods of anlysis employed are the mechanics of materials approach and the theory of elasticity approach. Analysis and design of components of structural/machine systems as experienced in aeronautical, civil, mechanical and nuclear engineering.

0101	Gilad Sharon M 7:00pm - 9:40pm	Seats (Total: 25) JMP 2216
SG01	Gilad Sharon M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Gilad Sharon M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM672 **Fundamentals for Thermal Systems**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Undergraduate engineering, physics or chemistry degree. Restriction: Permission of ENGR-Office of Advanced Engineering Education.

Included in this course is an introduction to thermodynamics, fluid mechanics and heat transfer. Emphasis is on gaining an understanding of the physical concepts through the solving of numerical problems associated with simple thermal fluid processes and cycles. Both ideal gases and multiphase fluids will be considered as the working fluids.

ME01	Kristen Hines Class time/details on ELMs	Seats (Total: 25) ONLINE

ENPM673 **Perception for Autonomous Robots**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENPM673 or ENPM808T. Formerly: ENPM808T.

Image Processing and Computer Vision techniques for Mobile Robots is taught. Three topics are covered: Image Processing (Image Enhancement, Filtering, Advanced Edge and Texture), 3D Vision (3D Geometry from Multiple view geometry, Motion Processing and Stereo) and an Introduction to Image Segmentation and Object Recognition. Students are introduced to a number of existing software toolboxes from Vision and Robotics, and will implement a number of smaller projects in Matlab.

0101	Cornelia Fermuller W 1:00pm - 3:40pm	Seats (Total: 65) JMP 3201
FL01	Cornelia Fermuller W 1:00pm - 3:40pm *This section is for NAVAIR Cohort students located outside of Maryland ONLY*	Seats (Total: 5) Location: TBA
SG01	Cornelia Fermuller W 1:00pm - 3:40pm	Seats (Total: 5) Location: TBA
SM01	Cornelia Fermuller W 1:00pm - 3:40pm	Seats (Total: 5) Location: TBA

ENPM685 **Security Tools for Information Security**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Familiarity with Linux and Windows operating systems, as well as TCP/IP and basic networking concepts. Credit only granted for: ENPM808D or ENPM685. Formerly: ENPM808D.

Students will perform host- and network-based security tasks relating to security, investigation, compliance verification and auditing using a wide selection of commonly used tools on both Windows and Linux platforms, with emphasis on open source tools.

0101	Kevin Shivers M 7:00pm - 9:40pm	Seats (Total: 70) JMP 3201
CY01	Kevin Shivers Class time/details on ELMs	Seats (Total: 30) ONLINE
SG01	Kevin Shivers M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Kevin Shivers M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM686 **Information Assurance**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENPM808E or ENPM686. Formerly: ENPM808E.

The first half of lectures provides an overview of cybersecurity. One third of these lectures focuses on the fundamentals of cybersecurity like authentication, access control, and security models. The second third focuses on the practice of cybersecurity using Unix and Windows NT as case studies. The last third is dedicated to security in distributed systems including network security, and World Wide Web security. The second half of the lectures focuses on the information assurance process. First, information assets are enumerated and classified. Second, the main vulnerabilities and threats are identified. Third, a risk assessment is conducted by considering the probability and impact of the undesired events. Finally, a risk management plan is developed that includes countermeasures involving mitigating, eliminating, accepting, or transferring the risks, and considers prevention, detection, and response.

0101	Edward Condon M 4:00pm - 6:40pm	Seats (Total: 50) JMP 3201
CY01	Edward Condon Class time/details on ELMs	Seats (Total: 20) ONLINE
SG01	Edward Condon M 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Edward Condon M 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM691 **Hacking of C programs and Unix Binaries**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENEE150; or students who have taken courses with comparable content may contact the department.

Teaches the fundamentals of secure programming in C. An in depth discussion on various security vulnerabilities (e.g., buffer overflows) in C applications will be taught with hands-on demo of concepts during the class. Students will learn how a C program runs "under-the-hood". The course will teach nitty-gritty of C programs by analyzing at the assembly level. The course discusses best practices (e.g., coding standards) and design principles for secure programming so that security can be built-in during design time. In addition to assignments, students are required to present papers related to this course.

0101	Dharmalingam Ganesan Th 7:00pm - 9:40pm	Seats (Total: 30) JMP 2121
CY01	Dharmalingam Ganesan Class time/details on ELMs	Seats (Total: 20) ONLINE
SG01	Dharmalingam Ganesan Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Dharmalingam Ganesan Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM695 **Secure Operating Systems**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENPM691 and CMSC106; or permission of instructor. And permission of ENGR-CDL-Office of Advanced Engineering Education. Credit only granted for: ENPM695 or ENPM808B. Formerly: ENPM808B. Additional information: This course assumes knowledge of C programming and a previous operating systems class or knowledge in various issues such as process management, process synchronization, the critical section problem, CPU scheduling, memory management, secondary storage management.

Operating systems are the basic building block on which programmers build applications and on which security-minded professionals rely, whether they are monitoring activity on a computer, testing applications for security, or determining how malicious code affected their network. This course covers advanced topics in operating systems including process management and communication, remote procedure calls, memory management (including shared memory and virtual memory), checkpointing and recovery, file system, I/O subsystem and device management, distributed file systems and security. The course consists of reading and discussing research papers and includes a course project.

0101	Ido Dubrawsky Tu 4:00pm - 6:40pm	Seats (Total: 52) JMP 2121
CY01	Ido Dubrawsky Class time/details on ELMs	Seats (Total: 20) ONLINE
SG01	Ido Dubrawsky Tu 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Ido Dubrawsky Tu 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM697 **Secure Software Testing and Construction**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of instructor; or (ENPM691 and CMSC106). And permission of ENGR-CDL-Office of Advanced Engineering Education. Credit only granted for: ENPM808K or ENPM697. Formerly: ENPM808K.

As software gets more complex, there is even more potential for vulnerabilities to remain in the production version. While traditional and emerging software testing methods are very good at detecting a large majority of "bugs" in the software, modifications to the methods are necessary to ensure vulnerabilities related to security are discovered and mitigated prior to release. In industry, there is also a cost-benefit analysis that determines the limits to pre-release testing, further enforcing the need to uniquely identify security vulnerabilities, potentially prioritizing their correction over other vulnerabilities. This course will cover methods of building security in from the beginning of development and testing the resulting software to ensure security vulnerabilities are detected. The course will use a mixture of textbook principles and research papers to cover the concepts. Students will also complete a course project.

0101	Dharmalingam Ganesan Th 4:00pm - 6:40pm	Seats (Total: 40) JMP 2121
CY01	Dharmalingam Ganesan Class time/details on ELMs	Seats (Total: 20) ONLINE
SG01	Dharmalingam Ganesan Th 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Dharmalingam Ganesan Th 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM808 **Advanced Topics in Engineering**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professiona master of engineering program. May be taken for repeated credit when identified by topic title.

0101	George Syrmos Contact instructor or department for details.	Seats (Total: 10)

ENPM808E **Advanced Topics in Engineering; Managing Software Engineering Projects**

Credits: 3

Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professiona master of engineering program. May be taken for repeated credit when identified by topic title.

0101	Salman Qureshi W 7:00pm - 9:40pm	Seats (Total: 25) JMP 2121
DE01	Salman Qureshi Class time/details on ELMs	Seats (Total: 20) ONLINE
SG01	Salman Qureshi W 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Salman Qureshi W 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM808F **Advanced Topics in Engineering; Robot Learning**

Credits: 3

Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professiona master of engineering program. May be taken for repeated credit when identified by topic title.

0101	Donald Sofge M 7:00pm - 9:40pm	Seats (Total: 50) JMP 2121
FL01	Donald Sofge M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SG01	Donald Sofge M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Donald Sofge M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM808G **Advanced Topics in Engineering; Additive Manufacturing for Aerospace, Energy and Water Applications**

Credits: 3

Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professiona master of engineering program. May be taken for repeated credit when identified by topic title.

In-depth understanding of Additive Manufacturing (AM) technologies and their applicability and limitations is important for future engineers and researchers in developing new engineering systems and identifying emerging opportunities in developing products for mass customization. This course can be divided into two parts, the first of which provides an introduction to AM technologies, while focusing on enabling features of design optimization for AM, material properties in AM, and advances in computational (techniques) for AM-fabricated material characterization. Here the aim is to provide engineers with the in-depth fundamental knowledge and tools to evaluate new opportunities in AM. The emerging relation between machine learning and AM will be presented as well to unlock the role machine learning would play in optimizing the design and AM applications. The 2nd part of the course provides case studies on applications in four targeted industrial sectors, namely: Aerospace, Defense, Energy and Water Harvesting applications. Real-life projects and their innovative components developed using AM techniques will be presented. Next-generation AM techniques that are not commercialized yet, will be presented too and discussed. All these case studies will demonstrate the potential opportunities and limitations associated with each of the four respective areas.

0101	Farah Singer Th 4:00pm - 6:40pm	Seats (Total: 20) JMP 2217
ME01	Farah Singer Class time/details on ELMs	Seats (Total: 20) ONLINE
SG01	Farah Singer Th 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Farah Singer Th 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM808P **Advanced Topics in Engineering; Manufacturing and Automation**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professiona master of engineering program. May be taken for repeated credit when identified by topic title.

0101	Mahesh Mani Tu 7:00pm - 9:40pm	Seats (Total: 50) JMP 3201
FL01	Mahesh Mani Tu 7:00pm - 9:40pm *This section is for the NavAir Cohort Florida location students only.*	Seats (Total: 5) Location: TBA

SG01	Mahesh Mani Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Mahesh Mani Tu 7:00pm - 9:40pm	Seats (Total: 10) Location: TBA

ENPM808Q **Advanced Topics in Engineering; Energy Policy**

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professiona master of engineering program. May be taken for repeated credit when identified by topic title.

0101	John Taber Th 7:00pm - 9:40pm	Seats (Total: 17) JMP 2120
SG01	John Taber Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	John Taber Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM808X **Advanced Topics in Engineering; Software Development for Robotics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty for students in the professiona master of engineering program. May be taken for repeated credit when identified by topic title.

Prerequisite: ENEE150 or equivalent and proficiency in object-oriented programming (OOP).

DE01	David Pietrocola Class time/details on ELMs	Seats (Total: 30) ONLINE

ENPM809I **Special Topics in Engineering; Embedded System Hacking and Security**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Gananand Kini, Robert Heinemann Tu 7:00pm - 9:40pm	Seats (Total: 35) JMP 2121
CY01	Robert Heinemann, Gananand Kini Tu 7:00pm - 9:40pm	Seats (Total: 10) ONLINE
SG01	Robert Heinemann, Gananand Kini Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Gananand Kini, Robert Heinemann Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM809K **Special Topics in Engineering; Fundamentals for Artificial Intelligence and Deep Learning Framework**

Credits: 3 Grading Method: Regular, Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Sohraab Soltani W 7:00pm - 9:40pm	Seats (Total: 99) KEB 1110
CY01	Sohraab Soltani Class time/details on ELMs	Seats (Total: 35) ONLINE

ENPM809O **Special Topics in Engineering; River Engineering**

Credits: 3 Grading Method: Regular, Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Zeinab Farahmandfar M 4:00pm - 6:40pm	Seats (Total: 20) JMP 2217
SG01	Zeinab Farahmandfar M 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

SM01	Zeinab Farahmandfar M 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM809X **Special Topics in Engineering; Data and Algorithms**

Credits: 3 Grading Method: Regular, Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Emre Gunduzhan Th 4:00pm - 6:40pm	Seats (Total: 30) JMP 2222
SG01	Emre Gunduzhan Th 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Emre Gunduzhan Th 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM809Y **Special Topics in Engineering; Introductory Robot Programming**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Zeid Kootbally M 7:00pm - 9:40pm	Seats (Total: 29) JMP 2217
DE01	Zeid Kootbally Class time/details on ELMs	Seats (Total: 20) ONLINE
FL01	Zeid Kootbally M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SG01	Zeid Kootbally M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

SM01	Zeid Kootbally M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM809Z **Special Topics in Engineering; Sustainability and Innovation**

Credits: 3 Grading Method: Regular, Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Mohammad Zaidi Th 4:00pm - 6:40pm	Seats (Total: 17) JMP 2120
ME01	Mohammad Zaidi Class time/details on ELMs	Seats (Total: 20) ONLINE
SG01	Mohammad Zaidi Th 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Mohammad Zaidi Th 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENRE Reliability Engineering Spring 2019

ENRE447 **Fundamentals of Reliability Engineering**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ENRE445 or ENRE447. Formerly: ENRE445.

Topics covered include: fundamental understanding of how things fail, probabilistic models to represent failure phenomena, life-models for non-repairable items, reliability data collection and analysis, software reliability models, and human reliability models.

0101	Katrina Groth M 3:30pm - 6:00pm	Seats (Total: 35) JMP 2121
ER01	Katrina Groth Class time/details on ELMs	Seats (Total: 7) ONLINE

RE01	Katrina Groth Class time/details on ELMs	Seats (Total: 5) ONLINE
SG01	Katrina Groth M 3:30pm - 6:00pm	Seats (Total: 2) Location: TBA
SM01	Katrina Groth M 3:30pm - 6:00pm	Seats (Total: 2) Location: TBA

ENRE489 **Special Topics in Reliability Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in reliability engineering.

Contact department for information to register for this course.

ENRE489G **Special Topics in Reliability Engineering; Fundamental Reliability Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics of current importance in reliability engineering.

Contact department for information to register for this course.

ENRE620 **Mathematical Techniques of Reliability Engineering**

Credits: 3 Grading Method: Regular, Audit

Also offered as: ENNU620.

Basic probability and statistics. Application of selected mathematical techniques to the analysis and solution of reliability engineering problems. Applications of matrices, vectors, tensors, differential equations, integral transforms, and probability methods to a wide range of reliability related problems.

Contact department for information to register for this course.

ENRE640 **Collection and Analysis of Reliability Data**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENRE602.

Basic life model concepts. Probabilistic life models, for components with both time independent and time dependent loads. Data analysis, parametric and nonparametric estimation of basic time-to-failure distributions. Data analysis for systems. Accelerated life models. Repairable systems modeling.

0101	Vasiliy Krivtsov F 9:00am - 11:40am	Seats (Total: 20) JMP 2222
ER01	Vasiliy Krivtsov F 9:00am - 11:40am	Seats (Total: 16) ONLINE
RE01	Vasiliy Krivtsov F 9:00am - 11:40am	Seats (Total: 2) ONLINE
SG01	Vasiliy Krivtsov F 9:00am - 11:40am	Seats (Total: 1) Location: TBA
SM01	Vasiliy Krivtsov F 9:00am - 11:40am	Seats (Total: 2) Location: TBA

ENRE645 **Human Reliability Analysis**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: ENRE645 or ENRE734. Formerly: ENRE734.

Methods of solving practical human reliability problems, cognitive and behavioral modeling, task analysis, performance shaping factors, error classification, distribution of human performance and uncertainty bounds, sources of human error probability data, human error risk mitigation, examples and case studies.

Additional Note: Also offered as ENSE698Gor ENRE645 or ENSE698G.

0101	Monifa Vaughn-Cooke Tu 9:00am - 11:40am	Seats (Total: 10) JMP 2217
ER01	Monifa Vaughn-Cooke Class time/details on ELMs	Seats (Total: 10) ONLINE
RE01	Monifa Vaughn-Cooke Class time/details on ELMs	Seats (Total: 10) ONLINE

ENRE648 **Special Problems in Reliability Engineering**

(Perm req)

Credits: 1-6

Grading Method: Regular, Audit

For students who have definite plans for individual study of approved problems. Credit given according to extent of work.

Contact department for information to register for this course.

ENRE648D **Special Problems in Reliability Engineering; Uncertainty Modeling and Analysis**

Credits: 3

Grading Method: Regular, Audit

For students who have definite plans for individual study of approved problems. Credit given according to extent of work.

Prerequisite: ENCE302; or students who have taken courses with comparable content may contact the department. Also offered as ENCE621. Credit only granted for ENCE621 or ENRE648D. Definition of engineering systems, knowledge levels using information science concepts as applied to engineering systems, sources and types of knowledge and ignorance, uncertainty sources and types for engineering systems, probability models, statistical models, fuzziness, fuzzy sets, fuzzy logic, fuzzy arithmetic, imprecise probabilities, evidence methods, uncertainty measures, uncertainty management, uncertainty reduction, applications of these analytical methods to engineering systems and in decision making.

0101	Bilal Ayyub MW 2:00pm - 3:15pm	Seats (Total: 15) EGR 0135

ENRE655 **Advanced Methods in Reliability Modeling**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: ENRE602. Credit only granted for: ENRE655 or ENRE665. Formerly: ENRE665.

Bayesian methods and applications, estimation of rare event frequencies uncertainty analysis and propagation methods, reliability analysis of dynamic systems, analysis of dependent failures, reliability of repairable systems, human reliability analysis methods and theory of logic diagrams and application to systems reliability.

0101	Mohammad Modarres M 11:00am - 1:40pm	Seats (Total: 15) JMP 2216
ER01	Mohammad Modarres Class time/details on ELMs	Seats (Total: 15) ONLINE

RE01	Mohammad Modarres Class time/details on ELMs	Seats (Total: 10) ONLINE

ENRE671 **Risk Assessment in Engineering**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENRE670. Credit only granted for: ENRE648W or ENRE671. Formerly: ENRE648W.

Introduction to risk management and decision-making, including uncertainty propagation, importance ranking, risk acceptance criteria, decision analysis and other decsion-making techniques, risk communication.

Also offered as ENME607. Credit granted for ENRE671 or ENME607.

0101	Jeffrey Herrmann TuTh 2:00pm - 3:15pm	Seats (Total: 30) JMP 2222
ER01	Jeffrey Herrmann Class time/details on ELMs	Seats (Total: 15) ONLINE
RE01	Jeffrey Herrmann Class time/details on ELMs	Seats (Total: 10) ONLINE

ENRE799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ENRE898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ENRE899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ENSE622 **Systems Requirements, Design and Trade-Off Analysis**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Permission of ENGR-Institute for Systems Research; and ENSE621. Recommended: Familiarity with calculus, probability, linear algebra, differential equations, & computer programming recommended. Credit only granted for: ENPM642 or ENSE622.

This course continues the model-based approach to systems engineering by introducing students to a variety of mathematical modeling and simulation techniques used to perform system performance, optimization, and trade-off analyses. Topics include: linear and integer programming; state machine models of finite state machines; development of simple intelligent agents; modeling Markov processes; queueing theory; multi-objective trade-off analyses; decision trees; stochastic (Monte Carlo) simulation, linear regression, some predictive analytic techniques; and an introduction to control theory. Mathematical models and simulations are developed and executed using MATLAB. The course includes a class project in which students solve a problem of interest to them using one or more of techniques addressed in class.

Also offered as ENPM642. Credit granted for ENSE622 or ENPM642

0101	John MacCarthy M 7:00pm - 9:40pm	Seats (Total: 30) JMP 2222
DE01	John MacCarthy M 7:00pm - 9:40pm	Seats (Total: 10) ONLINE
SG01	John MacCarthy M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	John MacCarthy M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENSE624 **Human Factors in Systems Engineering**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of ENGR-Institute for Systems Research. Credit only granted for: ENPM644 or ENSE624.

This course covers the general principles of human factors, or ergonomics as it is sometimes called. Human Factors (HF) is an interdisciplinary approach for dealing with issues related to people in systems. It focuses on consideration of the characteristics of human beings in the design of systems and devices of all kinds. It is concerned with the assignment of appropriate functions for humans and machines, whether the people serve as operators, maintainers, or users of the system or device. The goal of HF is to achieve compatibility in the design of interactive systems of people, machines, and environments to ensure their effectiveness, safety and ease of use.

Also offered as ENPM644. Credit granted for ENPM644 or ENSE624.

0101	Robert Beaton Th 7:00pm - 9:40pm	Seats (Total: 30) JMP 3201
DE01	Robert Beaton Th 7:00pm - 9:40pm	Seats (Total: 10) ONLINE
SG01	Robert Beaton Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Robert Beaton Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENSE626 **System Life Cycle Analysis and Risk Management**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of ENGR-Institute for Systems Research.

This course covers topics related to estimating the costs and risks incurred through the lifetimes of projects, products and systems. In addition, treatment is given to methods that determine the drivers of costs and risks and facilitate determination of the most effective alternatives to reducing them. Also covered, are relevant analytic tools from probability and statistics and also important managerial and organizational concepts. Extensive use is made of case studies and examples from industry and government.

0101	Nidak Sumrean Tu 7:00pm - 9:40pm	Seats (Total: 20) Location: TBA
DE01	Nidak Sumrean Tu 7:00pm - 9:40pm	Seats (Total: 10) ONLINE
SG01	Nidak Sumrean Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

SM01	Nidak Sumrean Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENSE627 **Systems Quality and Robustness Analysis**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ENGR-Institute for Systems Research. Credit only granted for: ENPM647 or ENSE627.

This course covers systems engineering approaches for creating optimal and robust engineering systems and for quality assurance. It provides an overview of the important tools for quality analysis and quality management of engineering systems. These tools are commonly used in companies and organizations. Focus is placed on the Baldrige National Quality Program, ISO 9000 certification, six-sigma systems, and Deming total quality management to examine how high quality standards are sustained and customer requirements and satisfactions are ensured. The Taguchi method for robust analysis and design is covered and applied to case studies. Issues of flexible design over the system life cycle are addressed. Statistical process control, international standards for sampling, and design experimentation are also studied.

Also offered as ENPM647. Credit granted for ENPM647 or ENSE627.

0101	Tony Barber W 7:00pm - 9:40pm	Seats (Total: 30) JMP 2222
DE01	Tony Barber W 7:00pm - 9:40pm	Seats (Total: 10) ONLINE
SG01	Tony Barber W 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Tony Barber W 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENSE698B **Special Topics in Systems Engineering; Applied Formal Methods**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH141 or equivalent. Introduces best practices for the application of formal methods, a set of mathematically rigorous techniques for the formal specification, validation, and verification of safety-critical systems, of which aircraft and spacecraft are the prime examples. Explores tools, techniques, and applications of formal methods, focusingon aerospace and robotic domains. Students examine the latest research to gain an understanding of the current state of the art, including the capabilities and limitations of applying formal methods for systems analysis. Students from all areas of engineering and computer science are encouraged to enroll.

0101	Huan Xu TuTh 11:00am - 12:15pm	Seats (Total: 20) PLS 1162

ENSE698G **Special Topics in Systems Engineering; Human Reliability Analysis**

Credits: 3 Grading Method: Regular, Audit

Also offered as ENRE645. Credit granted for ENRE645 or ENSE698G. Methods of solving practical human reliability problems, cognitive and behavioral modeling, task analysis, performance shaping factors, error classification, distribution of human performance and uncertainty bounds , sources of human error probability data, human error risk mitigation, examples and case studies.

0101	Monifa Vaughn-Cooke Tu 9:00am - 11:40am	Seats (Total: 10) JMP 2217
ER01	Monifa Vaughn-Cooke Class time/details on ELMs	Seats (Total: 10) ONLINE
RE01	Monifa Vaughn-Cooke Class time/details on ELMs	Seats (Total: 10) ONLINE

ENSE699 **Directed Study in Systems Engineering**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Directed study in Systems Engineering.

Contact department for information to register for this course.

ENSE799 **Systems Engineering Thesis; Masters Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

The application of systems engineering concepts, principles, and theories will be applied to the Master's Thesis project. Project/thesis work will be defined and selected early in student's program and supervised by a university faculty mentor.

Contact department for information to register for this course.

ENSP Environmental Science and Policy Spring 2019

ENSP101 **Introduction to Environmental Science**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNS

One of two required courses that introduce students to the topics studied and methods employed in environmental science and policy. Emphasis on scientific ways of knowing; the systems, cycles, flows, and interfaces that characterize the atmosphere, lithosphere, hydrosphere, and biosphere; the analysis of human impacts on these systems; and the nature of scientific uncertainty and methods of quantifying environmental processes.

Contact department for information to register for this course.

ENSP102 **Introduction to Environmental Policy**

Credits: 3 | Grading Method: Regular | General Education: DSHS

Additional information: May be taken before or after ENSP101.

Second of two courses that introduce students to the topics studied and methods employed in environmental science and policy. Emphasis on the process of formulating, implementing, and evaluating policy responses to environmental problems, with particular attention to policy controversies related to scientific uncertainty, risk assessment, the valuation of nature, and distributional equity. May be taken before or after ENSP101.

0101	Joanna Goger TuTh 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 22) SKN 0200 ATL 2416	Discussion
0102	Joanna Goger TuTh 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 22) SKN 0200 ATL 2352	Discussion
0103	Joanna Goger TuTh 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 23) SKN 0200 CHM 0124	Discussion
0104	Joanna Goger TuTh 9:30am - 10:45am Th 2:00pm - 2:50pm	Seats (Total: 22) SKN 0200 PLS 1158	Discussion
0105	Joanna Goger TuTh 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 22) SKN 0200 MTH B0423	Discussion

0106	Joanna Goger TuTh 9:30am - 10:45am Th 3:00pm - 3:50pm	Seats (Total: 22) SKN 0200 TYD 0111	Discussion
0107	Joanna Goger TuTh 9:30am - 10:45am Th 3:00pm - 3:50pm	Seats (Total: 22) SKN 0200 TYD 0111	Discussion

ENSP250 **Lawns in the Landscape: Environmental Hero or Villain?**

Credits: 3 Grading Method: Regular General Education: DSNS, SCIS

Examination of the lawn as an element in the anthropogenic landscape and its influence on global warming, regional air and water quality, ecological diversity, mammalian pesticide exposure and consumptive water use. Demographic and socioeconomic factors are examined in the context of being predictors of landscape aesthetic desires and lawn management behaviors. Policies that incentivize lawn alternatives or changes in lawn management behavior are discussed.

0101	Mark Carroll MW 4:00pm - 5:15pm	Seats (Total: 25) SYM 0209	

ENSP305 **Applied Quantitative Methods in Environmental Science and Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BIOM301, ECON321, GEOG306, PSYC200, or SOCY201; and (ENSP101 and ENSP102). And MATH120, MATH130, MATH136, or MATH140; or must have completed MATH220. Restriction: Must be in a major in AGNR-Dean-Environmental Science & Policy Program; or permission of AGNR-Dean-Environmental Science & Policy Program. Credit only granted for: ENSP305 or AREC382. Additional information: Applied topics covered in this course will supplement coursework in introductory statistics and mathematics; this course is not intended for students with significant previous advanced data analysis or statistical experience.

Intended for students interested in pursuing career or graduate research opportunities that will include management of environmental databases, detailed analysis of environmental data, and/or application of predictive environmental models. Students will learn necessary skills to manage and analyze environmental data through hands-on training in commonly used software and a series of topical case studies. Data analysis and data management will be taught using publicly available real-world environmental data sets.

0101	Annette Spivy TuTh 5:00pm - 6:15pm	Seats (Total: 23) ANS 0509	

ENSP306 **Fundamentals of Qualitative Research Methods for Environmental Studies**

Credits: 3 Grading Method: Regular

An introduction to research design and methods, with an in-depth focus on qualitative research methods and application to environmental studies. Topics include: writing an appropriate research question, identifying relevant methods, submitting a proposal to the Institutional Review Board, choosing appropriate sampling approaches, conducting interviews, focus groups, ethnographies, analyzing textual data, and presenting qualitative results.

0101	Caroline Boules	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	BPS 1238

ENSP330 **Introduction to Environmental Law**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: ENSP101 and ENSP102. Restriction: Junior standing or higher. And must be a major in the Environmental Science and Policy program; or permission of Environmental Science and Policy program.

An overview of environmental law, from its common law roots to its role in the modern regulatory state, including an examination of major federal environment statutes and the policy debates inherent in them. Other areas covered include civil and criminal enforcement, standing to sue, land use control, and regulatory takings.

0101	Joanna Goger	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	SYM 0215

ENSP342 **Environmental Threats to Oceans and Coasts: Towards an Integrated Policy Response**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: ENSP101 and ENSP102. Restriction: Must have earned a minimum of 60 credits. And must be a major in the Environmental Science and Policy program; or permission of Environmental Science and Policy program.

An interdisciplinary study of the challenges of maintaining the health and vitality of oceans and coasts in the face of climate change, extreme weather, and other threats including pollution, and oil and gas development. Exploration of four broad themes: resource management, conservation and stewardship, pollution, and coastal zone management. Also, an analysis of current efforts to integrate these themes through ecosystem-based management; marine spatial planning; and related policy responses.

0101	Annette Spivy	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	PLS 1111

ENSP386 **Internship**

(Perm req)

Credits: 3-6 Grading Method: Regular

Restriction: Must have internship proposal approved by the concentration advisor, the director of ENSP and the student's internship sponsor.

Contact department for information to register for this course.

ENSP399 **Special Topics in Environmental Science and Policy**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

A substantive and specialized examination of contemporary issues in environmental science or policy.

Contact department for information to register for this course.

ENSP399R **Special Topics in Environmental Science and Policy; Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

A substantive and specialized examination of contemporary issues in environmental science or policy.

0101	Ariana Sutton-Grier, Melissa Kenney F 10:00am - 1:00pm	Seats (Total: 15) Location: TBA
0301	Instructor: TBA Contact instructor or department for details.	Seats (Total: 15)
0601	Annette Spivy Contact instructor or department for details.	Seats (Total: 10)
1001	Jennifer Mullinax Contact instructor or department for details.	Seats (Total: 10)

ENSP400 **Capstone in Environmental Science and Policy**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

Prerequisite: ENSP101; and ENSP102. Restriction: Must be in Environmental Science and Policy program; and senior standing; and permission of the Environmental Science and Policy Program.

Integration of physical, biological, and social sciences with applications to environmental science and policy. Problem-solving and multi-disciplinary case study evaluations pertinent to contemporary and future issues related to the environment.

0101	Caroline Boules TuTh 3:30pm - 4:45pm	Seats (Total: 50) TWS 1310
0102	Mark Carroll TuTh 3:30pm - 4:45pm	Seats (Total: 30) TWS 1320

ENSP499 **Honors Thesis Research**

Credits: 1-6 Grading Method: Regular

Individual research, thesis, and oral defense. The research project will be conducted under the supervision of a faculty member.

Contact department for information to register for this course.

ENST Environmental Science and Technology Spring 2019

ENST100 **International Crop Production-Issues and Challenges in the 21st Century**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: LS

Credit only granted for: ENST100 or NRSC100. Formerly: NRSC100.

Examines the role of crop production in elevating humans out of poverty in developing countries. It will introduce students to the basic principles of plant and soil science underlying the international production of food crops and world food security. The role of multinational agencies such as the World Bank in the promotion of sustainable crop production using environmentally-sound technologies will also be discussed.

0101	Jose-Luis Izursa, Prabahkar Tamboli TuTh 11:00am - 12:15pm	Seats (Total: 38) CHM 0128

ENST140 **Sustainability and History: The Maryland Experience**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Examines the changing nature of concern over sustainability through the environmental history of the state of Maryland. The historical approach, supplemented by discussion of the basic scientific processes underlying ecosystem functions and human impacts on the environment, reveals both enduring and changing qualities of the search for sustainable patterns of living, beginning before 17th century European contact and continuing on into the environmental concerns of our own time.

Also offered as HIST189B. Credit only granted for HIST189B or ENST140.

0101	Robert Friedel MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 20) ESJ 0215 KEY 0126	Discussion
0102	Robert Friedel MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 20) ESJ 0215 KEY 0126	Discussion
0103	Robert Friedel MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 19) ESJ 0215 KEY 0126	Discussion
0104	Robert Friedel MW 1:00pm - 1:50pm F 2:00pm - 2:50pm	Seats (Total: 19) ESJ 0215 KEY 0126	Discussion

ENST200 **Fundamentals of Soil Science**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: LL | General Education: DSNL

Corequisite: CHEM131 and CHEM132; or permission of AGNR-Environmental Science & Technology department. Credit only granted for: ENST200 or NRSC200. Formerly: NRSC200.

Study and management of soils as natural bodies, media for plant growth and ecosystem components. Morphology, composition, formation, and conservation of soils. Chemical, biological, and physical properties are discussed in relation to the production of plants, the functioning of hydrologic and nutrient cycles, the protection of environmental quality, and engineering uses of soils.

0101	Maxine Levin, Raymond Weil TuTh 9:30am - 10:45am M 12:00pm - 2:50pm	Seats (Total: 20) CCC 1205 HJP 0210	Lab
0102	Maxine Levin, Raymond Weil TuTh 9:30am - 10:45am Tu 4:00pm - 6:50pm	Seats (Total: 20) CCC 1205 HJP 0210	Lab
0104	Maxine Levin, Raymond Weil TuTh 9:30am - 10:45am Th 4:00pm - 6:50pm	Seats (Total: 20) CCC 1205 HJP 0210	Lab

ENST214 **Introduction to Fish and Wildlife Sciences**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE

Prerequisite: BSCI160 and BSCI161; or BSCI106.

Lectures, discussion, and readings in social, biological, and human dimension issues facing fisheries and wildlife biologists and natural resource managers in the United States. Coverage will include history and philosophical discussions of fish and wildlife sciences; conservation and management; principles of community, habitat, and animal ecology and management; and interrelations of wildlife, fish, and forestry.

0101	Shannon Pederson TuTh 2:00pm - 3:15pm	Seats (Total: 45) ANS 0422	

ENST233 Introduction to Environmental Health

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNS

Examines how humans are affected by the quality of our air, water, soil and food supply as well as how human activities alter these survival necessities. Students will learn how the evolution and prosperity of human populations have resulted in degradation of our environment and the impact of environmental degradation on the health of people. The implications of individual and collective choices for sustainable food production, population management, and resource utilization will be explored.

0101	Lance Yonkos TuTh 2:00pm - 3:15pm M 1:00pm - 1:50pm	Seats (Total: 25) ANS 0408 ANS 0422	 Discussion
0102	Lance Yonkos TuTh 2:00pm - 3:15pm M 2:00pm - 2:50pm	Seats (Total: 25) ANS 0408 ANS 0422	 Discussion
0103	Lance Yonkos TuTh 2:00pm - 3:15pm W 1:00pm - 1:50pm	Seats (Total: 25) ANS 0408 ANS 0422	 Discussion
0104	Lance Yonkos TuTh 2:00pm - 3:15pm W 2:00pm - 2:50pm	Seats (Total: 25) ANS 0408 ANS 0422	 Discussion

ENST309 Advanced Field Soil Morphology

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

This is a field-oriented course that provides advanced training for students in the techniques used to (1) describe soil morphology, and site and profile characteristics, (2) make land use interpretations based on soil characteristics, and (3) classify soils. This class is designed to prepare students for the National Collegiate Soil Judging Contest and for students to gain experience in the description and interpretation of soils in the field. Students will be exposed to a variety of soil landscapes and geology from outside of the northeastern U.S.

0101	Martin Rabenhorst Contact instructor or department for details.	Seats (Total: 15)

ENST334 Environmental Toxicology

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131, CHEM132, and BSCI207; or permission of AGNR-Environmental Science & Technology department.

Concepts and case histories in ecotoxicology. Emphasis on origin and variety of environmental pollutants, routes of biological exposure, modes of toxicological action and effects on individual organisms, populations and ecosystems. Ecotoxicological issues in the Chesapeake Bay will be used as examples.

0101	Meredith Bohannon TuTh 12:30pm - 1:45pm	Seats (Total: 35) ANS 0412

ENST388 Honors Thesis Research

Credits: 3-6 Grading Method: Regular, Pass-Fail, Audit

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

2201	Martin Rabenhorst Contact instructor or department for details.	Seats (Total: 1)
2905	Stephanie Yarwood Contact instructor or department for details.	Seats (Total: 3)
3001	Lance Yonkos Contact instructor or department for details.	Seats (Total: 1)

ENST389 Internship

(Perm req) Credits: 3 Grading Method: Sat-Fail

Credit will be granted for practical work carried out by students place in work environment related to their stated career goals. Students must do an in-depth study in some portion of the work experience and produce a special project or report related to this study. A student work log is also recommended. An evaluation from the external supervisor of the project will be required. Credit arranged with supervising faculty member.

0101	Patrick Kangas	Seats (Total: 50)
	Contact instructor or department for details.	

ENST404 Ecological and Natural Resources Ethics

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST214 and ENST360. Recommended: ENST314, ENST410, and ENST460. Restriction: Senior standing or higher. Also offered as: ENST604. Credit only granted for: ENST604 or ENST404.

Bridges science and management with ethical theory and concepts to help scientists, regulators, and managers understand how to deal with potential ethical dilemmas that arise in natural resource and environmental management implementation and policy development.

0101	Reginal Harrell	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ANS 0422

ENST405 Energy and Environment

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH140 or MATH120; or must have completed MATH220. Restriction: Junior standing or higher. And must be in Environmental Sci & Tech program; or must be in Environmental Sci & Tech: Ecological Tech Design program; or must be in Environmental Sci & Tech: Environmental Health program; or must be in Environmental Sci & Tech: Soil & Watershed Science program; or must be in Environmental Sci & Tech: Natural Resources Mgmt program. Also offered as: ENST605. Credit only granted for: ENST405, ENSP350, ENST605, or MEES698Z.

Introduction to the role of energy in environmental and human-dominated systems. Discussion of the historical and modern production and consumption of energy. Introduction to energy systems computer simulation and energy auditing.

Also offered as MEES698Z. Credit granted for ENST405 or MEES698Z.

0101	James Zucchetto	Seats (Total: 40)
	TuTh 5:00pm - 6:15pm	ANS 0422

ENST406 **Applied Forestry Practices**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST200. And ENST360; or PLSC471. Also offered as: PLSC475. Credit only granted for: ENST406 or PLSC475.

Focuses on the applied dynamics of a set of forest practices such as management, silviculture, measurement and inventory, preparation of a management plan, etc, within the urban/rural interface. Several field trips are included to gain hands-on experience.

0101	Jonathan Kays, Robert Tjaden TuTh 12:30pm - 1:45pm	Seats (Total: 12) ANS 1422	

ENST421 **Soil Chemistry**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST200. Credit only granted for: ENST421 or NRSC421. Formerly: NRSC421.

The chemistry and composition of mineral and organic colloids in soils, including ion exchange, oxidation-reduction, acidity, surface charge, and solution chemistry. Lectures and readings pertain to plant nutrition, waste disposal, and groundwater quality.

0101	Candice Duncan TuTh 12:30pm - 1:45pm Tu 2:00pm - 4:50pm	Seats (Total: 14) CHE 2145 HJP 0113	 Lab

ENST422 **Soil Microbial Ecology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST200; or 1 course in BCHM; or must have completed a course in microbiology; or students who have taken courses with comparable content may contact the department. Also offered as: ENST622. Credit only granted for: ENST422 or NRSC422. Formerly: NRSC422.

The interdisciplinary study of soil microorganisms and their interactions with the mineral matrix; resulting in processes such as nutrient cycling, decontamination, and natural product production. We will focus on the diversity of soil communities, their survival strategies, and the new strategies used to study these communities.

0101	Stephanie Yarwood TuTh 9:30am - 10:45am	Seats (Total: 25) ANS 0422	

ENST423 **Soil-Water Pollution**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM104 and ENST200; and permission of AGNR-Environmental Science & Technology department. Credit only granted for: ENST423 or NRSC423.

Reaction and fate of pesticides, agricultural fertilizers, industrial and animal wastes in soil and water with emphasis on their relation to the environment.

0101	Robert Hill	Seats (Total: 35)	
	TuTh 11:00am - 12:15pm	ANS 0412	

ENST430 **Wetland Soils**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST200. Credit only granted for: ENST430, ENST630, or NRSC461. Formerly: NRSC461.

The soils of wetlands including hydrology, chemistry, and genesis are discussed. Federal and regional guidelines for wetland soils are covered with an emphasis on validating interpretations through field observations.

0101	Martin Rabenhorst	Seats (Total: 14)	
	MW 2:00pm - 2:50pm	EGR 3102	
	M 3:00pm - 6:00pm	HJP 0210	Lab

ENST436 **Emerging Environmental Threats**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST233; or permission of AGNR-Environmental Science & Technology department.

Examine new and potential environmental concerns in the air, water, soil, space, and the built environment. Emphasis on studying the intrinsic links between ecosystem and human health. Topics will include climate change, resource consumption, biodiversity change, infectious disease, non-traditional pollutants, and other complex and significant environmental concerns.

0101	Paul Leisnham	Seats (Total: 35)	
	MWF 11:00am - 11:50am	ANS 0422	

ENST445 **Ecological Risk Assessment**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST360 or BSCI361; and (BIOM301 and ENST334). Or permission of AGNR-Environmental Science & Technology department.

Assessment of ecological impacts of perturbations on natural systems. Course will describe methods for estimating environmental impacts including extrapolating from laboratory and field data. The role of regulatory agencies and implications of scientific uncertainty on risk management will be covered.

0101	Scott Lynn, Emily Morrison	Seats (Total: 30)
	MTh 6:30pm - 7:45pm	ANS 0422

ENST452 **Wetland Restoration**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: (BSCI160 and BSCI161; or BSCI106); and (BSCI362, ENST450, ENST360, or BSCI361). Or permission of AGNR-Environmental Science & Technology department. Credit only granted for: ENST452, ENST652, or MEES652.

Design, construction, and evaluation of wetlands restored or created to provide ecosystem services or to mitigate losses due to development. Topics include fundamental properties of wetlands, ecological restoration theory, site selection and goal-setting, design plans, practices for establishing wetland hydrology, substrate, and vegetation, and restored ecosystem monitoring.

0101	Andrew Baldwin	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	ANS 0412

ENST453 **Watershed Science: Water Balance, Open Channel Flow, and Near Surface Hydrology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ENST453 or ENST653.

Concepts of surface water balance, surface radiative flux, precipitation and evaporation measurements.

0101	Michael Kearney	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	ANS 0422

ENST462 **Field Techniques in Wildlife Management**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENST460. And BSCI160 and BSCI161; or BSCI106. And BSCI170 and BSCI171; or BSCI105. Recommended: ENST461. Restriction: Permission of AGNR-College of Agriculture & Natural Resources.

Hands-on experience with field techniques in wildlife management focusing on various methods of conducting indices, estimates, and censuses of wildlife populations. Includes capture and handling of amphibians, reptiles, birds, and mammals by use of drift fences, cover boards, mist nets, box traps, and dart guns.

0101	Shannon Pederson	Seats (Total: 15)	
	F 11:00am - 11:50am	ANS 0509	
	F 1:00pm - 2:50pm	ANS 0505	Lab
	F 12:00pm - 12:50pm	ANS 0505	Discussion

ENST472 **Capstone II**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

CORE: CS

General Education: DSSP

Prerequisite: ENST471. Restriction: Must be in a major within AGNR-Environmental Science & Technology department; and permission of AGNR-Environmental Science & Technology department.

This course is the second in a two-part series. Students will continue work on projects proposed and begun in ENST471. Focus on professional project preparation, presentation, critical evaluation on environmental science research, professional development, and career planning. Students will develop and present original projects and critique projects presented by others.

1201	Andrew Baldwin	Seats (Total: 15)
	Contact instructor or department for details.	
1205	William Bowerman	Seats (Total: 15)
	Contact instructor or department for details.	
1501	Gary Felton	Seats (Total: 15)
	Contact instructor or department for details.	
1505	Lance Yonkos	Seats (Total: 15)
	Contact instructor or department for details.	
1601	Robert Hill	Seats (Total: 15)
	Contact instructor or department for details.	
1701	Patrick Benson	Seats (Total: 15)
	Contact instructor or department for details.	

1801	Patrick Kangas Contact instructor or department for details.	Seats (Total: 15)
1802	Stephanie Lansing Contact instructor or department for details.	Seats (Total: 15)
1803	Paul Leisnham Contact instructor or department for details.	Seats (Total: 15)
1805	Michael Kearney Contact instructor or department for details.	Seats (Total: 5)
2101	Brian Needelman Contact instructor or department for details.	Seats (Total: 7)
2104	Shannon Pederson Contact instructor or department for details.	Seats (Total: 15)
2105	Wendy Peer Contact instructor or department for details.	Seats (Total: 15)
2201	Martin Rabenhorst Contact instructor or department for details.	Seats (Total: 15)
2601	David Tilley Contact instructor or department for details.	Seats (Total: 15)
2701	Raymond Weil Contact instructor or department for details.	Seats (Total: 15)
2801	Kate Tully Contact instructor or department for details.	Seats (Total: 2)
2804	Jose-Luis Izursa Contact instructor or department for details.	Seats (Total: 15)
2805	Gurpal Toor Contact instructor or department for details.	Seats (Total: 15)
2905	Stephanie Yarwood Contact instructor or department for details.	Seats (Total: 15)
3101	Steven Mirsky Contact instructor or department for details.	Seats (Total: 5)

ENST481 **Ecological Design**

(Perm req)

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: (MATH120 or MATH140; or must have completed MATH220); and (PHYS121 and CHEM131); and (BSCI361; or students who have taken courses with comparable content may contact the department). Or permission of instructor. Restriction: Permission of AGNR-Environmental Science & Technology department. Also offered as: MEES681. Credit only granted for: ENST481, ENST681, or MEES681.

An advanced survey course on the field of ecological design. Principles of design are illustrated with case studies from biologically-based waste treatment systems, ecosystem management and sustainable development. Concepts covered include ecology, ecological engineering, nutrient cycling, emergy, lifecycle analysis, and design process. Technologies include treatment wetlands, living machines, anaerobic digestion, rain gardens, bioswales, bioremediation, algal turf scrubbers, and green building design.

0101	Stephanie Lansing TuTh 12:30pm - 1:45pm Tu 9:00am - 10:50am	Seats (Total: 20) ANS 0422 ANS 0538	 Lab
0102	Stephanie Lansing TuTh 12:30pm - 1:45pm Th 9:00am - 10:50am	Seats (Total: 20) ANS 0422 ANS 0538	 Lab

ENST489 **Research Experience**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An advanced research-based course in the field of environmental science and technology.

Contact department for information to register for this course.

ENST499 **Special Topics in Environmental Science and Technology**

(Perm req)

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

An independent study, and/or lecture, and/or laboratory series organize to study a selected phase of Environmental Science and Technology not covered by existing courses. Credit arranged with supervising faculty member.

Contact department for information to register for this course.

ENST499Q **Special Topics in Environmental Science and Technology; Biosphere 2 and Ecological Design in the Desert**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

An independent study, and/or lecture, and/or laboratory series organize to study a selected phase of Environmental Science and Technology not covered by existing courses. Credit arranged with supervising faculty member.

This is a special travel-study course on ecological design in the American southwest desert. The course will meet once per week during Spring Semester until Spring Break when a field trip will take place to Arizona. During the field trip students will visit a variety of sites and learn first-hand about issues of ecological design. These sites will include Biosphere 2 and Arcosanti, where the student group will be lodging during the trip. The course will include lectures and readings on ecological design covered before and during the field trip. Students also will be expected to carry out directed research as part of the course. The subject matter of the course will span a time frame from pre-Hispanic, native American cultures, highlighted by visits to archeological sites, through to visions what ecological design might become in the future (Arcosanti and Biosphere 2). Matching humans to the with available and appropriate technologies will be the main theme of the course.

0101	Patrick Kangas M 5:00pm - 5:50pm Contact instructor or department for details. *Restriction: Permission of AGNR-Environmental Science & Technology department.*	Seats (Total: 8) ANS 0538

ENST499Y **Special Topics in Environmental Science and Technology; College Teaching**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

An independent study, and/or lecture, and/or laboratory series organize to study a selected phase of Environmental Science and Technology not covered by existing courses. Credit arranged with supervising faculty member.

1508	Reginal Harrell Contact instructor or department for details.	Seats (Total: 5)
2104	Shannon Pederson Contact instructor or department for details.	Seats (Total: 4)
2701	Raymond Weil Contact instructor or department for details.	Seats (Total: 4)
3201	Peter May Contact instructor or department for details.	Seats (Total: 4)

ENST499Z **Special Topics in Environmental Science and Technology; Introductory University Instruction**

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

An independent study, and/or lecture, and/or laboratory series organize to study a selected phase of Environmental Science and Technology not covered by existing courses. Credit arranged with supervising faculty member.

0101	Lance Yonkos	Seats (Total: 1)
	Contact instructor or department for details.	

ENST604 **Advanced Ecological and Natural Resource Ethics**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: ENST214 and ENST360. Recommended: ENST314, ENST410, and ENST460. Credit only granted for: ENST404 or ENST604.

Bridges science and management with ethical theory and concepts to help scientists, regulators, and managers understand how to deal with potential ethical dilemmas that arise in natural resource and environmental management implementation and policy development.

0101	Reginal Harrell	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	ANS 0422

ENST608 **Research Methods**

(Perm req)

Credits: 1-4

Grading Method: Regular, Audit

Development of research viewpoint by detailed study and report on crop and soil research of the Maryland Agriculture Experiment Station or review and discussion of literature on specific agricultural problems or new research techniques.

Contact department for information to register for this course.

ENST622 **Advanced Soil Microbial Ecology**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: ENST200; or 1 course in BCHM; or must have completed one course in microbiology; or students who have taken courses with comparable content may contact the department. Also offered as: ENST422. Credit only granted for: ENST422 or ENST622.

The interdisciplinary study of soil microorganisms and their interactions with the mineral matrix; resulting in processes such as nutrient cycling, decontamination, and natural product production. We will focus on the diversity of soil communities, their survival strategies, and the new strategies used to study these communities.The course will include an examination of current literature in this field.

0101	Stephanie Yarwood	Seats (Total: 9)
	TuTh 9:30am - 10:45am	ANS 0422

ENST630 **Advanced Wetland Soils**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENST200. Credit only granted for: ENST630, ENST430, or NRSC461.

The soils of wetlands including hydrology, biogeochemistry, and pedogenesis, including a focused discussion of current literature. Federal and regional guidelines for wetland soils are covered with an emphasis on validating interpretations through field observations.

0101	Martin Rabenhorst	Seats (Total: 6)	
	MW 2:00pm - 2:50pm	EGR 3102	
	M 3:00pm - 6:00pm	HJP 0210	Lab
	W 3:00pm - 3:50pm	ANS 1422	Discussion

ENST681 **Advanced Ecological Design**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed one semester of calculus; and (CHEM131 and PHYS121). Or permission of instructor. Also offered as: MEES681. Credit only granted for: ENST481, ENST681, or MEES681.

An advanced survey course on the field of ecological design. Principles of design are illustrated with case studies from biologically-based waste treatment systems, ecosystem management and sustainable development.

0101	Stephanie Lansing	Seats (Total: 20)
	TuTh 9:30am - 10:45am	HJP 1213C

ENST689 **Special Topics**

Credits: 1-3 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

1201	Andrew Baldwin	Seats (Total: 15)
	Contact instructor or department for details.	

1205	William Bowerman Contact instructor or department for details.	Seats (Total: 15)
1401	Frank Coale Contact instructor or department for details.	Seats (Total: 15)
1501	Gary Felton Contact instructor or department for details.	Seats (Total: 15)
1508	Reginal Harrell Contact instructor or department for details.	Seats (Total: 15)
1601	Robert Hill Contact instructor or department for details.	Seats (Total: 15)
1801	Patrick Kangas Contact instructor or department for details.	Seats (Total: 15)
1802	Stephanie Lansing Contact instructor or department for details.	Seats (Total: 15)
1803	Paul Leisnham Contact instructor or department for details.	Seats (Total: 15)
1805	Michael Kearney Contact instructor or department for details.	Seats (Total: 15)
2001	Bahram Momen Contact instructor or department for details.	Seats (Total: 15)
2005	Jennifer Mullinax Contact instructor or department for details.	Seats (Total: 15)
2101	Brian Needelman Contact instructor or department for details.	Seats (Total: 15)
2102	Masoud Negahban-Azar Contact instructor or department for details.	Seats (Total: 15)
2103	Mitchell Pavao-Zuckerman Contact instructor or department for details.	Seats (Total: 15)
2105	Wendy Peer Contact instructor or department for details.	Seats (Total: 15)

2201	Martin Rabenhorst Contact instructor or department for details.	Seats (Total: 15)
2601	David Tilley Contact instructor or department for details.	Seats (Total: 15)
2701	Raymond Weil Contact instructor or department for details.	Seats (Total: 15)
2805	Gurpal Toor Contact instructor or department for details.	Seats (Total: 15)
2905	Stephanie Yarwood Contact instructor or department for details.	Seats (Total: 15)
3001	Lance Yonkos Contact instructor or department for details.	Seats (Total: 15)

ENST689N **Special Topics; Living Machine and Aquatic Restorer Construction**

Credits: 2 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

0101	Patrick Kangas Contact instructor or department for details.	Seats (Total: 1)

ENST689P **Special Topics; Water and Development: A Global Change**

Credits: 3 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

Prerequisite: MATH220 or MATH140 (students who have taken courses with comparable content may contact the department). This course offers a multidisciplinary investigation of water systems development and management through real-world case studies. It explores the relation between water and development that is increasingly influenced by conflicts over the resource at both regional and global scale.

0101	Masoud Negahban-Azar TuTh 11:00am - 12:15pm	Seats (Total: 15) ANS 1422

ENST689Y **Special Topics; Advances in Research, Plant Membrane Biology**

Credits: 2 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

0101	Wendy Peer, Angus Murphy Contact instructor or department for details.	Seats (Total: 10)

ENST689Z **Special Topics; Introductory University Instruction**

Credits: 1-3 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

0101	Lance Yonkos Contact instructor or department for details.	Seats (Total: 1)
2905	Stephanie Yarwood Contact instructor or department for details.	Seats (Total: 5)

ENST702 **Environmental Science and Technology: Communication and Professional Development**

Credits: 2 Grading Method: Regular, Audit

Prerequisite: ENST602. Restriction: Must be in Environmental Science and Technology (Master's) program; or must be in Environmental Science and Technology (Doctoral) program; or permission of instructor.

Training in communication and professional development to prepare students to succeed in careers within the fields of environmental science and technology. Topics will include manuscript and technical writing, job search, communication with academic and non-academic audiences, multi-disciplinary collaboration, management (project, personnel, time), professionalism, leadership, ethics, and career opportunities. Course emphasizes practical training through facilitated discussions and critique practicums.

0101	Brian Needelman W 11:00am - 11:50am F 12:00pm - 2:00pm	Seats (Total: 12) ANS 1422 ANS 1422	 Discussion

ENST789 **Advances in Research**

Credits: 1-4 Grading Method: Regular, Audit

A study of recent advances in agronomy research.

Contact department for information to register for this course.

ENST798 **Graduate Seminar**

Credits: 1 Grading Method: Regular

Designed to provide a venue for interactive discussion between ENST graduate students and other members of the ENST community regarding thesis/dissertation research planned or conducted as part of the students graduate program.

0101	Stephanie Yarwood, Martin Rabenhorst W 1:00pm - 1:50pm	Seats (Total: 40) ANS 0408

ENST799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ENST898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ENST899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ENTM Entomology Spring 2019

ENTM609 **Integrated Pest Management**

Credits: 4 Grading Method: Regular

A modular course with an interdisciplinary approach to the theory and practice of integrated pest management. Topics of modules, each 3-4 weeks long, vary each semester over a three year time frame, with the first module serving as a prerequisite for all other modules.

0101	Kelly Hamby	Seats (Total: 20)	
	Tu 8:00am - 10:45am	PLS 1161	
	Th 8:00am - 10:45am	PLS 1161	Lab

ENTM720 **Native, Invasive, and Exotic Species**

Credits: 3 Grading Method: Regular

This course will examine introduced species impact, how invasive and exotic species spread, their impact of native species and methods of invasive species control.

PLE1	Magdalene Ngeve	Seats (Total: 8)	
	Meets February 25, 2019 - May 17, 2019		
	Class time/details on ELMs	ONLINE	
	Restricted to students in the Professional Entomology Program.		

ENTM740 **Organic Practices**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Alternatives to chemical pesticides, what being certified organic entails and how these practices relate to ecological principles. This course will discuss various natural processes that occur in the farm setting to determine the best practices to maintain biodiversity and successful crop production.

PLE1	Tammatha O'Brien	Seats (Total: 8)	
	Meets February 25, 2019 - May 17, 2019		
	Class time/details on ELMs	ONLINE	
	Restricted to students in the Professional Entomology Program.		

ENTM788C **Entomological Topics; Colloquium**

Credits: 1-3 Grading Method: Regular, Audit

One lecture or one two-hour laboratory period a week for each credit hour. Lectures, group discussions or laboratory sessions on selected topics such as: aquatic insects, biological control of insects, entomological literature, forest entomology, history of entomology, insect biochemistry, insect embryology, immature insects, insect behavior, insect communication, principles of entomological research.

0101	Jian Wang	Seats (Total: 55)	
	F 12:00pm - 12:50pm	PLS 1130	
	F 1:00pm - 1:50pm	PLS 1130	Discussion

ENTM799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ENTM898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENTM899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ENTS Telecommunications Spring 2019

ENTS625 **Management and Organizational Behavior in the Telecommunications Industry**

Credits: 3 Grading Method: Regular, Audit

Roles of the general manager in: determining target markets and designing strategies for them; formulating and implementing corporate and business level strategies; and staffing, developing, and managing human resources and coordinating them with the organization's financial and physical resources. Also emphasizes the building of interpersonal skills with respect to the selection of members for work teams and team formation, leadership of teams toward the achievement of strategic goals and total quality, the development and motivation of team members, and the evaluation of team and individual performance.

Restricted to ENTS majors. All non-majors will need to obtain department permission.

0101	Clarence Wesley W 2:00pm - 4:45pm	Seats (Total: 40) SQH 1105
0201	Clarence Wesley W 5:30pm - 8:15pm	Seats (Total: 40) SQH 1105

ENTS629C **Special Topics in Cybersecurity; Fundamentals of IT Systems Security**

Credits: 3 Grading Method: Regular, Audit

Selected topics of current importance in cybersecurity.

Restricted to ENTS majors.

0101	Fazlul Kabir W 5:30pm - 8:15pm	Seats (Total: 30) EGR 3106

ENTS630 **The Economics of International Telecommunications**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Telecommunications (Master's) program.

Basic microeconomic principles used by telecommunications firms, including supply and demand, elasticity, costs, productivity, pricing, market structure and competitive implications of alternative market structures. Market failures and government intervention. Public policy processes affecting business operations.

Restricted to ENTS majors. All non-majors will need to obtain department permission.

0101	Jahangir Boroumand Th 5:30pm - 8:15pm	Seats (Total: 40) SQH 1105
0201	Jahangir Boroumand Th 2:00pm - 4:45pm	Seats (Total: 40) SQH 1105

ENTS632 **Telecommunications Marketing Management**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Telecommunications (Master's) program.

Topics covered include strategic marketing, sales and customer service challenges confronting organizations in the computer, communications and media industries. The course also addresses volatile technology, regulatory and competitive environments as a backdrop to strategic planning and management in the marketing domain.

Restricted to ENTS majors. All non-majors will need to obtain department permission.

0101	Janet Wagner Tu 5:30pm - 8:15pm	Seats (Total: 40) SQH 1105
0201	Janet Wagner Tu 2:00pm - 4:45pm	Seats (Total: 40) SQH 1105

ENTS635 **Decision Support Methods for Telecommunication Managers**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Telecommunications (Master's) program.

The aim of this course is to introduce management science techniques for informed decision making. Topics covered can include data analysis and regression, optimization models and applications (workforce scheduling, manufacturing, network design, facility location), sensitivity analysis, decision trees, risk analysis and business simulation models. Emphasis will be on telecommunications managerial problems, model development and the use of software packages for decision support.

Restricted to ENTS majors. All non-majors will need to obtain department permission.

0101	Kazim Ruhi M 5:30pm - 8:15pm	Seats (Total: 40) SQH 1105
0201	Kazim Ruhi M 2:00pm - 4:45pm	Seats (Total: 40) SQH 1105

ENTS641 Networks and Protocols II

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENTS640. Restriction: Must be in Telecommunications (Master's) program.

Techniques for the specification, design, analysis, verification and testing of communication protocols are discussed. The course includes detailed discussion on routing protocols in the Internet. This includes Routing Information Protocol (RIP), Enchanced Interior Gateway Routing Protocol (EIGRP). Open Shortest Path First (OSPF), and Border Gateway Protocol (BGP4).

0101	Mehdi Kalantari Khandani Th 5:30pm - 8:15pm	Seats (Total: 40) EGR 3106
0201	Mehdi Kalantari Khandani Th 2:00pm - 4:45pm	Seats (Total: 40) CHM 0119

ENTS649C Special Topics in Networking; Internet of Things - Systems and Protocols

Credits: 3 Grading Method: Regular, Audit

Selected topics of current importance in networking.

0101	Alkan Soysal W 2:00pm - 4:45pm	Seats (Total: 30) ITV 1111

ENTS656 **Introduction to Cellular Communication Networks**

Credits: 3 Grading Method: Regular, Audit

Concepts and techniques involved in wireless digital communications wit emphasis on cellular and PCS systems. Properties of Mobile radio channels; intersymbol interference, multipath, and fading effects; interleaving and diversity; multiple access schemes (TDMA, FDMA, CDMA); interuser interference, traffic issues, and cell capacity; power control strategies; frequency reuse and channel assignment; handoff, paging, and location update; cell layout; introduction to cellular and PCS standards.

Restricted to ENTS majors.

0101	Michael Dellomo Tu 5:30pm - 8:15pm Th 5:30pm - 8:15pm	Seats (Total: 20) CHE 2118 AVW 1458	 Lab
0102	Michael Dellomo Tu 5:30pm - 8:15pm W 2:00pm - 4:45pm	Seats (Total: 20) CHE 2118 AVW 1458	 Lab
0201	Michael Dellomo Tu 2:00pm - 4:45pm Th 9:00am - 11:45am	Seats (Total: 20) ATL 1114 AVW 1458	 Lab

ENTS669B **Special Topics in Computing; Distributed Systems in a Virtual Environment**

Credits: 3 Grading Method: Regular, Audit

Selected topics of current importance in computing.

Restricted to ENTS majors.

0101	Jeffrey McKinney M 5:30pm - 8:15pm	Seats (Total: 18) AVW 1324
0201	Jeffrey McKinney W 5:30pm - 8:15pm	Seats (Total: 18) AVW 1324

ENTS669D **Special Topics in Computing; Introduction to Machine Learning**

Credits: 3 Grading Method: Regular

Selected topics of current importance in computing.

Please click here for further course information.

0101	Behtash Babadi	Seats (Total: 10)
	MW 3:30pm - 4:45pm	EGR 1202

ENTS699B **Independent Study in Telecommunications; Embedded Signal Processing**

(Perm req)

Credits: 1-3 Grading Method: Regular

Individual instruction course. See ENTS program office for section number.

Prerequisite: permission of ENTS Program.

0101	Shuvra Bhattacharyya	Seats (Total: 5)
	Contact instructor or department for details.	

ENTS699M **Independent Study in Telecommunications; Python Programming**

Credits: 1 Grading Method: Regular, Audit

Individual instruction course. See ENTS program office for section number.

0101	Michael Dellomo	Seats (Total: 10)
	Contact instructor or department for details.	

ENTS759A **Advanced Topics in Communications; 3G/4G Wireless Networks and Systems**

Credits: 3 Grading Method: Regular, Audit

Selected advanced topics in communications.

Restricted to ENTS majors.

0101	Kamran Etemad	Seats (Total: 25)
	M 1:00pm - 3:45pm	ITV 1111

ENTS759B **Advanced Topics in Communications; Wireless OFDM Systems**

Credits: 3 Grading Method: Regular, Audit

Selected advanced topics in communications.

Prerequisite: ENTS622. Restricted to ENTS majors.

0101	Alejandra Mercado Tu 2:00pm - 4:45pm	Seats (Total: 16) JMP 1109	

ENTS759E **Advanced Topics in Communications; Design and Planning of Next Generation of Cellular Infrastructure**

Credits: 3 Grading Method: Regular, Audit

Selected advanced topics in communications.

Restricted to ENTS majors. Please click here for further course information

0101	Rikin Thakker F 5:30pm - 8:15pm	Seats (Total: 30) EGR 3106	

EPIB Epidemiology and Biostatistics Spring 2019

EPIB300 **Biostatistics for Public Health Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR

Prerequisite: Minimum grade of C- in CHEM131 and CHEM132. Restriction: Must be in Public Health Science program; and must have earned a minimum of 60 credits. Also offered as: HLTH300. Credit only granted for: EPIB300, EPIB315 or HLTH300.

An examination of biostatistical concepts and procedures as they relate to contemporary issues in public health. Focus on applications, hands-on-experience, and interpretations of statistical findings in public health research.

As agreed to during your change of major workshop or orientation to PHSC: - PHSC students who declared their major BEFORE the spring 2018 semester are required to take EPIB300 before EPIB301. - PHSC students who declared their major DURING the spring 2018 semester and later are required to take EPIB301 before EPIB315.

0101	Jing Zhang TuTh 11:00am - 11:50am M 8:00am - 9:50am	Seats (Total: 20) SPH 1312 SPH 0301	 Discussion
0102	Jing Zhang TuTh 11:00am - 11:50am M 10:00am - 11:50am	Seats (Total: 20) SPH 1312 SPH 0301	 Discussion

0103	Jing Zhang	Seats (Total: 20)	
	TuTh 11:00am - 11:50am M 12:00pm - 1:50pm	SPH 1312 SPH 0301	Discussion
0104	Jing Zhang	Seats (Total: 20)	
	TuTh 11:00am - 11:50am M 2:00pm - 3:50pm	SPH 1312 SPH 0301	Discussion
0105	Jing Zhang	Seats (Total: 20)	
	TuTh 11:00am - 11:50am Th 2:00pm - 3:50pm	SPH 1312 SPH 0305	Discussion
0108	Jing Zhang	Seats (Total: 20)	
	TuTh 11:00am - 11:50am F 2:00pm - 3:50pm	SPH 1312 SPH 0305	Discussion

EPIB301 **Epidemiology for Public Health Practice**

Credits: 3 Grading Method: Regular

Restriction: Must be in Public Health Science program; or must be in Community Health program. And must have earned a minimum of 45 credits. Also offered as: HLTH301. Credit only granted for: EPIB301 or HLTH301.

An examination of the discipline of epidemiology and its application to public health issues and practices, covering current epidemiological concepts and methods.

As agreed to during your change of major workshop or orientation to PHSC: - PHSC students who declared their major BEFORE the spring 2018 semester are required to take EPIB300 before EPIB301. - PHSC students who declared their major DURING the spring 2018 semester and later are required to take EPIB301 before EPIB315.

0101	Typhanye Dyer	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm F 9:00am - 9:50am	ESJ 0224 PLS 1146	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0102	Typhanye Dyer	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm F 10:00am - 10:50am	ESJ 0224 PLS 1111	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		

0103	Typhanye Dyer	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm F 11:00am - 11:50am	ESJ 0224 PLS 1111	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0104	Typhanye Dyer	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm F 12:00pm - 12:50pm	ESJ 0224 PLS 1146	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0105	Typhanye Dyer	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm M 12:00pm - 12:50pm	ESJ 0224 SPH 0302	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0106	Typhanye Dyer	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm M 1:00pm - 1:50pm	ESJ 0224 SPH 0302	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0107	Typhanye Dyer	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm M 2:00pm - 2:50pm	ESJ 0224 SPH 0302	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0108	Typhanye Dyer	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm M 3:00pm - 3:50pm	ESJ 0224 SPH 0302	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0201	Typhanye Dyer	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm M 10:00am - 10:50am	ESJ 0224 SPH 0302	Discussion
	Restricted to students in the Behavioral and Community Health major.		
0202	Typhanye Dyer	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm M 3:00pm - 3:50pm	ESJ 0224 SPH 0303	Discussion
	Restricted to students in the Behavioral and Community Health major.		

0203	Typhanye Dyer	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm M 11:00am - 11:50am	ESJ 0224 SPH 0303	Discussion
	Restricted to students in the Behavioral and Community Health major.		
SG91	Bonnie Richter	Seats (Total: 40)	
	Tu 9:30am - 12:00pm	BLD2 3022	
	Restricted to Shady Grove students in the Public Health Science major (code: 12140).		

EPIB315 **Biostatistics for Public Health Practice**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSAR

Prerequisite: Minimum grade of C- in EPIB301. Restriction: Must be in one of the following programs (Public Health Science; Community Health). Also offered as: HLTH300. Credit only granted for: EPIB300, EPIB315 or HLTH300. Formerly: EPIB300.

An examination of biostatistical concepts and procedures as they relate to contemporary issues in public health. Focus on applications, hands-on-experience, and interpretations of statistical findings in public health research.

As agreed to during your change of major workshop or orientation to PHSC: - PHSC students who declared their major BEFORE the spring 2018 semester are required to take EPIB300 before EPIB301. - PHSC students who declared their major DURING the spring 2018 semester and later are required to take EPIB301 before EPIB315.

0101	Jing Zhang	Seats (Total: 20)	
	TuTh 11:00am - 11:50am M 8:00am - 9:50am	SPH 1312 SPH 0301	Discussion
	Restricted to College Park students in the Public Health Science major.		
0102	Jing Zhang	Seats (Total: 20)	
	TuTh 11:00am - 11:50am M 10:00am - 11:50am	SPH 1312 SPH 0301	Discussion
	Restricted to College Park students in the Public Health Science major.		
0103	Jing Zhang	Seats (Total: 20)	
	TuTh 11:00am - 11:50am M 12:00pm - 1:50pm	SPH 1312 SPH 0301	Discussion
	Restricted to College Park students in the Public Health Science major.		

0104	Jing Zhang	Seats (Total: 20)	
	TuTh 11:00am - 11:50am M 2:00pm - 3:50pm	SPH 1312 SPH 0301	Discussion
	Restricted to College Park students in the Public Health Science major.		
0105	Jing Zhang	Seats (Total: 20)	
	TuTh 11:00am - 11:50am Th 2:00pm - 3:50pm	SPH 1312 SPH 0305	Discussion
	Restricted to College Park students in the Public Health Science major.		
0108	Jing Zhang	Seats (Total: 20)	
	TuTh 11:00am - 11:50am F 2:00pm - 3:50pm	SPH 1312 SPH 0305	Discussion
	Restricted to College Park students in the Public Health Science major.		
0201	Jing Zhang	Seats (Total: 20)	
	TuTh 11:00am - 11:50am M 4:00pm - 5:50pm	SPH 1312 SPH 0301	Discussion
	Restricted to students in the Behavioral and Community Health major.		
0202	Jing Zhang	Seats (Total: 20)	
	TuTh 11:00am - 11:50am F 12:00pm - 1:50pm	SPH 1312 SPH 0305	Discussion
	Restricted to students in the Behavioral and Community Health major.		

EPIB330 **The Coming Plague: Public Health Perspectives**

Credits: 3 Grading Method: Regular

Prerequisite: BSCI202.

Disease control and prevention is fundamental to the health of local, national, and global populations. Infectious agents are constantly adapting and breaching our defenses. Factors related to society, the environment, and our increasing global interconnectedness increase the likelihood of disease emergence and spread. Vaccines and antibiotics, demographic changes and urbanization, climate change and natural disasters, international travel and commerce, poverty and war create conditions for infectious diseases to spread. So how do we design and execute solutions to public health threats? How do research, policies, interventions, and budgets affect public health systems?

SG91	Sara Bazaco	Seats (Total: 35)	
	W 6:00pm - 8:30pm	BLD3 3219	

EPIB399 **Epidemiology and Biostatistics Independent Study**

Credits: 1-3 Grading Method: Regular

The EPIB undergraduate independent study is an opportunity for undergraduates from other departments in the SPH or the university to work with an Epidemiology and Biostatistics faculty member on research or special projects that are based out of EPIB.

Contact department for information to register for this course.

EPIB463 **Introduction to Biostatistical Programming**

Credits: 3 Grading Method: Regular, Audit

An introduction to basic programming principles; data analysis tasks such as the calculation of summary statistics and the creation of graphs; and the implementation of statistical analysis concepts such as T-tests, ANOVA and correlation. Querying and managing data sets using SQL in SAS will also be covered.

0101	Raul Cruz-Cano TuTh 9:30am - 10:45am	Seats (Total: 35) JMP 1202

EPIB610 **Foundations of Epidemiology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EPIB300; or equivalent undergraduate statistics or biostatistics course with a grade of C- or higher; or a score of 70% or higher on EPIB300 placement exam. Credit only granted for: EPIB610 or HLTH720. Formerly: HLTH720.

Introduction to the discipline of epidemiology and its applications to health issues and practices. Basic epidemiologic concepts and methods will be covered.

0101	Rodman Turpin Class time/details on ELMs	Seats (Total: 20) ONLINE
PLH1	Rodman Turpin Class time/details on ELMs *Must be in Public Health Policy & Practice Program. For permission to enroll, contact oes@umd.edu.*	Seats (Total: 20) ONLINE

EPIB611 **Intermediate Epidemiology**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of B- from (SPHL602, EPIB610); or a minimum score of 70% on the SPHL602 or EPIB610 waiver exam.

Analysis of epidemiologic methods as applied to epidemiologic research, analysis of bias, confounding, effect modification issues, overview of design, implementation, and analysis of epidemiologic studies.

0101	Cher Dallal	Seats (Total: 20)
	Th 4:00pm - 6:45pm	SPH 0307

EPIB623 **Epidemiologic Methods in Health Disparities Research**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed or be concurrently enrolled in SPHL602; or EPIB610.

An examination of the measurement, monitoring, analysis, and reporting of health disparities in the U.S. Through in-depth examples and class activities, students will learn about the state of health disparities, epidemiologic methods for health disparity assessments, and best practices for translating data on health disparities for policy makers.

0101	Natalie Slopen	Seats (Total: 20)
	Tu 1:00pm - 3:45pm	ESJ B0320

EPIB633 **Health Survey Design and Analysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SPHL602 or EPIB610; or permission of Instructor. Recommended: EPIB697.

An overview of types of survey research designs, questionnaire design, measurement issues, and techniques for recruiting and interacting with participants. Students will discuss and implement a variety of health survey analysis techniques, including how to utilize SAS statistical software to estimate descriptive statistics and implement regression models, while accounting for complex survey designs.

0101	Quynh Nguyen	Seats (Total: 20)
	W 1:00pm - 3:45pm	CCC 1200

EPIB650 **Biostatistics I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EPIB300; or equivalent undergraduate statistics or biostatistics course with a grade of C- or higher; or a score of 70% or higher on EPIB placement exam. Credit only granted for: EPIB650, HLTH651, or HLTH688B. Formerly: HLTH651 and HLTH688B.

Basic statistical concepts and procedures for Public Health. Focuses on applications, hands-on-experience, and interpretations of statistical findings.

0101	Raul Cruz-Cano Class time/details on ELMs	Seats (Total: 20) ONLINE
PLH1	Raul Cruz-Cano Class time/details on ELMs *Must be in Public Health Policy & Practice Program. For permission to enroll, contact oes@umd.edu.*	Seats (Total: 20) ONLINE

EPIB651 **Applied Regression Analysis**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of B- from (SPHL602, EPIB650); or a minimum score of 70% on the SPHL602 or EPIB650 waiver exam. Recommended: EPIB697 or previous experience working with SAS is highly recommended.

An introduction to important statistical methods used in public health research, including nonparametric hypothesis testing, ANOVA, simple and multiple linear regression, logistic regression, and categorical data analysis.

0101	Xin He Tu 4:00pm - 6:45pm	Seats (Total: 20) SPH 0305

EPIB653 **Applied Survival Data Analysis**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EPIB651.

Overview of statistical methods for anlayzing censored survival data, including the Kaplan-Meier estimator, the log-rank test, Cox PH model.

0101	Mei-Ling Lee Tu 1:00pm - 3:45pm	Seats (Total: 20) SPH 0301

EPIB661 **Applied Multivariate Data Analysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed EPIB651 or permission of instructor. Recommended: Previous experience with at least one statistical software package (e.g. SAS, R, STATA). SAS is the main software package used for demonstration in class.

Multivariate analysis targets data with simultaneous measurements on many variables and studies the relationship between these variables. This course introduces important multivariate analysis methods used in public health research. Topics include multivariate regression analysis, multivariate analysis of variance (MANOVA), principal component analysis (PCA), factor analysis, discriminant analysis (classification), clustering analysis, canonical correlation analysis (CCA) and correspondence analysis (CA).

0101	Tianzhou Ma M 1:00pm - 3:45pm	Seats (Total: 20) ATL 1114

EPIB740 **Advanced Methods in Epidemiology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EPIB650, EPIB610, EPIB612, EPIB651, and EPIB611.

In-depth investigation of epidemiologic methods for making causal inferences and solving complex methodological problems. Multivariate models emphasized.

0101	Hongjie Liu M 4:00pm - 6:45pm	Seats (Total: 20) SPH 0305

EPIB778 **Internship in Public Health**

(Perm req)

Credits: 1-4 Grading Method: Regular

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

Contact department for information to register for this course.

EPIB785 **Internship in Public Health**

(Perm req)

Credits: 1-3 Grading Method: Regular

Prerequisite: Permission of SPHL-Epidemiology & Biostatistics department. Repeatable to 3 credits.

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

0208	Mei-Ling Lee	Seats (Total: 12)
	Contact instructor or department for details.	

EPIB786 **Capstone Project in Public Health**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of SPHL-Epidemiology & Biostatistics department.

Capstone experience providing opportunity to apply knowledge and skills to a specific public health problem or issue. Completion of project relevant to public health under the direction of an advisor.

Contact department for information to register for this course.

EPIB798 **Independent Study**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Master or doctoral students who desire to pursue special research problems under the direction of a faculty memeber of the department may register for 1-6 hours of credit under this number.

Contact department for information to register for this course.

EPIB799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

EPIB898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EPIB899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

FGSM398 **Federal and Global Experiential Learning**

Credits: 3-9 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

This is the experiential course component of the Federal Fellows Program and Global Fellows Program.

0101	Jayakumar Arasan, Joan Burton, Nazanine Beyranvand M 6:30pm - 7:40pm	Seats (Total: 75) TWS 1310	
0201	Nazanine Beyranvand, Joan Burton, Jayakumar Arasan Th 6:30pm - 7:40pm	Seats (Total: 75) TWS 1310	

FILM Film Studies Spring 2019

FILM245 **Film Form and Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA | General Education: DSHU

Also offered as: ENGL245. Credit only granted for: ENGL245 or FILM245.

Introduction to film as art form and how films create meaning. Basic film terminology; fundamental principles of film form, film narrative, and film history. Examination of film technique and style over past one hundred years. Social and economic functions of film within broader institutional, economic, and cultural contexts.

Restriction: Must not have completed ENGL245 or FILM245. Also offered as: ENGL245. Credit only granted for: CMLT214, CMLT245 or FILM 245. Formely: CMLT214."

0201	Paul Cote TuTh 2:00pm - 3:15pm Tu 3:30pm - 6:00pm	Seats (Total: 30) TWS 0320 TWS 0320	 Lab
0301	Paul Cote TuTh 11:00am - 12:15pm Tu 3:30pm - 6:00pm	Seats (Total: 30) TWS 0320 TWS 0320	 Lab

FILM298D **Special Topics in International Film Studies; Film Art in a Global Society**

Credits: 3 | Grading Method: Regular

Special topics in International Film.

Also offered as: CMLT280. Credit only granted for: CMLT280 or FILM298D.

0101	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	W 5:00pm - 7:30pm	TWS 0320	Lab
	F 12:00pm - 12:50pm	TWS 0236	Discussion
0102	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	W 5:00pm - 7:30pm	TWS 0320	Lab
	F 1:00pm - 1:50pm	TWS 1107	Discussion
0103	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	W 5:00pm - 7:30pm	TWS 0320	Lab
	F 9:00am - 9:50am	TWS 0201	Discussion
0104	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	W 5:00pm - 7:30pm	TWS 0320	Lab
	F 1:00pm - 1:50pm	TWS 0221	Discussion

FILM298K **Special Topics in International Film Studies; Gender and Sexuality in Israeli Cinema**

Credits: 3 Grading Method: Regular General Education: DVUP

Special topics in International Film.

Also offered as ISRL249K, JWST219B, WMST298T, and LGBT298T. Credit only granted for ISRL249K, JWST219B, FILM298K, WMST298T, or LGBT298T. This course will explore the different ways gender and sexuality have been represented in Israeli Cinema over time. We will examine notions of "manhood" and "womanhood" within the Israeli social context, as well as look at examples of outliers, exceptions, transgressors, and pariahs. We will investigate different types of representations of gender and sexuality, asking how they configure secular society, the Orthodox/ Haredi religious community, the LGBTQ community, the Arab/Palestinian communities, the Israeli soldier population, and more.

0101	Shalom Rosenberg	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	TWS 1321

FILM302 **Cinema History II: The Sound Era**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENGL245, FILM245, SLLC283, or FILM283. Restriction: Must have permission of the Film Studies program.

Introduction to the international history of cinema from sound around 1930 to the present.

0101	Luka Arsenjuk	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	JMZ 1122

FILM311 **Documentary Film**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENGL245, FILM245, or SLLC283; or permission of ARHU-College of Arts & Humanities. Credit only granted for: FILM311 or ENGL329L.

A survey of currents in the history of the documentary film, beginning with early cinema and continuing through to more recent manifestations.

0101	Oliver Gaycken	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	TWS 0214

FILM319B **Special Topics in Documentary, Animation, Experimental Cinema, and Other Visual Media; Disney without Disney - The Afterlives of Children's Media Icons**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examine the possibilities of non-narrative cinema, or cinema that is structured differently from the fiction feature film, as well as other media (television, digital imagery, and photography) that entertain a close relationship with cinema in terms of form, content, and audience. Content varies.

Prerequisite: ENGL245, FILM245, FILM283, or SLLC283; or permission of in structor. Also offered as ENGL329G. Credit only granted for FILM319B or ENGL329G.

0101	Paul Cote	Seats (Total: 30)
	MW 3:30pm - 4:45pm	TWS 0236

FILM319D **Special Topics in Documentary, Animation, Experimental Cinema, and Other Visual Media; Geopolitics of Contemporary Storytelling**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examine the possibilities of non-narrative cinema, or cinema that is structured differently from the fiction feature film, as well as other media (television, digital imagery, and photography) that entertain a close relationship with cinema in terms of form, content, and audience. Content varies.

0101	Mauro Resmini TuTh 3:30pm - 4:45pm	Seats (Total: 25) JMZ 0122

FILM329N **Special Topics in National/International Cinemas; Politics and Memory on Screen: A History of Latin American Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examine one or more national cinematic traditions (including Hollywood cinema), or may look across traditions comparatively, for example at international and/or transnational phenomena. Content varies.

0101	Daniel Richter W 3:30pm - 4:45pm Class time/details on ELMs	Seats (Total: 30) SQH 1101 ONLINE

FILM332 **Brazilian Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Also offered as: PORT332. Credit only granted for: PORT332, FILM332, or PORT378. Formerly: PORT378.

Brazilian films from the late 1950s to the present with a special view to the relationship between cinema, society, historical dates, and social changes in Brazil. Taught in English.

0101	Regina Igel Tu 11:00am - 12:15pm Th 11:00am - 12:15pm	Seats (Total: 30) JMZ 0122 JMZ 0103

FILM359M **Special Topics in Genres/Auteurs/Cinema Movements; Melodrama**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examine narrative cinema from the perspective of content (themes, issues, structures) and style through the lens of genre, auteurship (a concept of authorship in film studies), and/or historical aesthetic movements that have been influential in the development of cinema as an art and film studies as a field. Content varies.

Also offered as ENGL329D. Credit only granted for ENGL329D or FILM359M. Prerequisite: ENGL245, FILM245, SLLC283, or FILM283; or permission of instructor.

0101	Marianne Conroy TuTh 11:00am - 12:15pm	Seats (Total: 30) TWS 0236

FILM359W **Special Topics in Genres/Auteurs/Cinema Movements; Race, Film and Narrative**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examine narrative cinema from the perspective of content (themes, issues, structures) and style through the lens of genre, auteurship (a concept of authorship in film studies), and/or historical aesthetic movements that have been influential in the development of cinema as an art and film studies as a field. Content varies.

Prerequisite: ENGL245, FILM245, SLLC283, or FILM283; or permission of instructor. Credit only granted for: FILM359W or ENGL329W.

0101	Oliver Gaycken	Seats (Total: 30)
	TuTh 9:30am - 10:45am	TWS 0205

FILM359X **Special Topics in Genres/Auteurs/Cinema Movements; Classic Foreign Films**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examine narrative cinema from the perspective of content (themes, issues, structures) and style through the lens of genre, auteurship (a concept of authorship in film studies), and/or historical aesthetic movements that have been influential in the development of cinema as an art and film studies as a field. Content varies.

Also offered as ARTH389Q. Credit only granted for ARTH389Q and FILM359X. Students will explore classic foreign films from India, Japan, China, France, Italy, Germany, Denmark, Sweden, Russia, and other countries. This course is designed to enable students to examine historically and artistically significant films made since 1945 by some of the most important directors in world cinema.

0101	Jason Kuo	Seats (Total: 25)
	M 1:00pm - 3:30pm	HBK 0302J

FILM361 **Cinema and Globalization**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENGL245, FILM245, SLLC283, or FILM283; or permission of ARHU-College of Arts & Humanities. Also offered as: SLLC361. Credit only granted for: SLLC361, FILM361, SLLC368G, or CMLT498C. Formerly: SLLC368G or CMLT498C.

Introduction to cinema as a global phenomenon.

0101	Luka Arsenjuk	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	JMZ 1215

FILM370 **Introduction to Digital Video Production**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: FILM245; and (FILM301 or FILM302). Restriction: Permission of ARHU-Film Studies department. Additional information: Priority in enrollment will be given to students majoring in Film Studies.

An introduction to basic video production using digital tools. Students will learn principles of pre-production, production, and post-production. Aesthetics, theory, and practical aspects will be examined in the context of short film production. The fundamentals of developing a screenplay, storyboard, cinematography, lighting, sound design, and editing will be discussed and explored.

0101	Narendra Ratnapala	Seats (Total: 15)
	MW 3:30pm - 6:00pm	JMZ 0118

FILM388 **Experiential Learning: Film Studies**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Connects students' theoretical understanding of film studies, as obtained through the classroom, to professional experience.

Contact department for information to register for this course.

FILM423 **Women and French Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as: FREN423. Credit only granted for: FREN423 or FILM423.

Cultural identity, social boundaries and gender roles in French film as well as introduction to film textual analysis and diverse film theories (semiotics, film and psychoanalysis, feminist film theory, structuralism, narratology, spectatorship and cultural studies). Taught in French.

0101	Caroline Eades	Seats (Total: 30)
	MW 2:00pm - 3:15pm	JMZ 0122

FILM429G **Special Topics in National/International Cinemas; Global Art Cinemas**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Courses in National/International Cinemas may examine one or more national cinematic traditions (including Hollywood cinema), or may look across traditions comparatively, for example at international and/or transnational phenomena. Content varies.

Also offered as ARTH489Q. Credit granted for ARTH489Q or FILM429G. Global art cinemas often challenge their audiences and demand more active engagement because of their unconventional modes of story-telling and their emphases on the directors' personal expressions. Students will critically examine some of the most talked-about and engaging art films, with special attention to the influence of art history on the films of Wong Kar-Wai, Zhang Yimou, Jia Zhangke, Kurosawa, Ozu, Visconti, Resnais , Greenaway, Tarkovsky, del Toro, Potter, Varda, Tarantino, Scorsese, and others.

0101	Jason Kuo	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	HBK 0302J

FILM429J **Special Topics in National/International Cinemas; Terrorism and Political Violence in Italy**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Courses in National/International Cinemas may examine one or more national cinematic traditions (including Hollywood cinema), or may look across traditions comparatively, for example at international and/or transnational phenomena. Content varies.

0101	Mauro Resmini	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	JMZ 2122

FILM469E **Special Topics in Film Theories II; Representing the Holocaust**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics in film theories.

Also offered as JWST419C. Credit granted for FILM469E or JWST419C.

0101	Eric Zakim	Seats (Total: 30)
	MW 2:00pm - 3:15pm	KNI 1103

FILM499 **Directed Study in Film Studies**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Readings and Research in Film Studies under faculty supervison.

Contact department for information to register for this course.

FIRE First-Year Innovation & Research Experience Spring 2019

FIRE151 **FIRE SEMESTER 2: Sustainability Analytics**

Credits: 3 Grading Method: Regular General Education: DSHS

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining the Sustainability Analytics research stream.

0101	Thanicha Ruangmas Tu 11:00am - 11:50am Contact instructor or department for details.	Seats (Total: 36) ATL 2339

FIRE153 **FIRE SEMESTER 2: Found In Translation**

Credits: 3 Grading Method: Regular General Education: DSNS

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining the Found In Translation research stream.

0101	Carolina Vieira W 12:00pm - 12:50pm Contact instructor or department for details.	Seats (Total: 36) ATL 2339

FIRE154 **FIRE SEMESTER 2: Risk Communication & Resilience**

Credits: 3 Grading Method: Regular General Education: DSHS

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining the Risk Communication and Resilience research stream.

0101	Emina Herovic Tu 12:30pm - 1:20pm Contact instructor or department for details.	Seats (Total: 36) ATL 2339

FIRE157 **FIRE SEMESTER 2: Addiction Science**

Credits: 3 Grading Method: Regular General Education: DSHS

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining the Addiction Science research stream.

0101	Cristina Risco W 3:00pm - 3:50pm Contact instructor or department for details.	Seats (Total: 36) ATL 2339

FIRE160 **FIRE SEMESTER 2: Transgenerational Brain Initiative**

Credits: 3 Grading Method: Regular General Education: DSNS

Recommended: FIRE120. Restriction: Must be in the program FIRE.

FIRE SEMESTER 2 course for students in the FIRE program joining the Transgenerational Brain Initiative research stream.

0101	Yun Choi W 4:00pm - 4:50pm Contact instructor or department for details.	Seats (Total: 36) ATL 2339

FIRE163 **FIRE SEMESTER 2: Animal and Human Relationships**

Credits: 3 Grading Method: Regular General Education: DSHS

Recommended: FIRE120. Restriction: Must be in the program FIRE.

FIRE SEMESTER 2 course for students in the FIRE program joining the Animal and Human Relationships research stream.

0101	Sarah Racz Th 11:00am - 11:50am Contact instructor or department for details. *For students registering to be a part of the Human Relationships research team.*	Seats (Total: 20) ATL 2339
0201	Sarah Racz Th 11:00am - 11:50am Contact instructor or department for details. *For students registering to be a part of the Animal Relationships research team.*	Seats (Total: 15) ATL 2339

FIRE164 **FIRE SEMESTER 2: Autonomous Unmanned Systems**

Credits: 3 Grading Method: Regular General Education: DSNS

Recommended: FIRE120. Restriction: Must be in the program FIRE.

FIRE SEMESTER 2 course for students in the FIRE program joining the Autonomous Unmanned Systems research stream.

0101	Derrick Yeo	Seats (Total: 36)
	Tu 3:30pm - 4:20pm Contact instructor or department for details.	ATL 2339

FIRE165 **FIRE SEMESTER 2: Designing Innovations**

Credits: 3 Grading Method: Regular

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining the Designing Innovations research stream.

0101	Mohammad Fazelpour	Seats (Total: 18)
	Th 12:30pm - 1:20pm Contact instructor or department for details.	ATL 2339

FIRE166 **FIRE SEMESTER 2: Evolution of Sex Differences**

Credits: 3 Grading Method: Regular General Education: DSNS

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining this research group.

0101	Ashley Nazario Toole	Seats (Total: 36)
	Th 2:00pm - 2:50pm Contact instructor or department for details.	ATL 2339

FIRE170 **FIRE SEMESTER 2: Phillips Virtual Culture**

Credits: 3 Grading Method: Regular

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining the Phillips Virtual Culture research stream.

0101	Kyungjin Yoo	Seats (Total: 36)
	Th 3:30pm - 4:20pm Contact instructor or department for details.	ATL 2339

FIRE171 **FIRE SEMESTER 2: Capital One Machine Learning**

Credits: 3 Grading Method: Regular

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining the Capital One Machine Learning research stream.

0101	Raymond Tu W 2:00pm - 2:50pm Contact instructor or department for details.	Seats (Total: 36) ATL 2339

FIRE172 **FIRE SEMESTER 2: Engineering Biosensors**

Credits: 3 Grading Method: Regular General Education: DSNS

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining the Engineering Biosensors research stream.

0101	Catherine Spirito W 10:00am - 10:50am Contact instructor or department for details.	Seats (Total: 36) ATL 2339

FIRE173 **FIRE SEMESTER 2: Deep Brain Neurotech**

Credits: 3 Grading Method: Regular

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining the Neural Systems research stream.

0101	Nevine El-leithy W 1:00pm - 1:50pm Contact instructor or department for details.	Seats (Total: 36) ATL 2339

FIRE174 **FIRE SEMESTER 2: African American Digital Humanities - Digital Archives**

Credits: 3 Grading Method: Regular General Education: DSHU

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining the African American Digital Humanities - Digital Archives research stream.

0101	Jessica Lu	Seats (Total: 36)
	Tu 9:30am - 10:20am Contact instructor or department for details.	ATL 2339

FIRE176 **FIRE SEMESTER 2: Simulating Particle Detection**

Credits: 3 Grading Method: Regular General Education: DSNS

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining this research group.

0101	Muge Karagoz	Seats (Total: 36)
	Tu 2:00pm - 2:50pm Contact instructor or department for details.	ATL 2339

FIRE177 **FIRE SEMESTER 2: Atmospheric Data Science**

Credits: 3 Grading Method: Regular General Education: DSNS

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining this research group.

0101	Alexandra Jones	Seats (Total: 36)
	Th 9:30am - 10:20am Contact instructor or department for details.	ATL 2339

FIRE180 **FIRE SEMESTER 2: Host-Pathogen Interactions**

Credits: 3 Grading Method: Regular General Education: DSNS

Recommended: FIRE120.

FIRE SEMESTER 2 course for students in the FIRE program joining this research group.

0101	Jessica O'Hara	Seats (Total: 36)
	W 11:00am - 11:50am Contact instructor or department for details.	ATL 2339

FMSC Family Science Spring 2019

FMSC110 **Families and Global Health**

Credits: 3 Grading Method: Regular General Education: DSHS, DVCC

Students will explore, define, and study global health, social determinants of health, health inequalities, gender inequality, family violence, and maternal and child health using a global perspective.

0101	Laura Drew	Seats (Total: 50)
	TuTh 9:30am - 10:45am	CCC 1111

FMSC170 **Future of Families: Issues and Controversies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Credit only granted for: FMSC170 or FMSC298F. Formerly: FMSC298F.

Examination of current trends and controversial issues in family life, including issues of marriage, reproductive technologies, adoption, child custody, remarriage, and marital violence.

0101	Elise Resnick	Seats (Total: 50)
	Th 3:30pm - 6:00pm	SPH 1302

FMSC260 **Couple Relationships**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS

Credit only granted for: FMSC260 or FMST260. Formerly: FMST260.

Couple relationships and their alternatives in contemporary dating, courtship and marriage.

Restricted to majors or non-majors with less than or equal to 60 credits.

0101	Elise Resnick	Seats (Total: 65)
	TuTh 11:00am - 12:15pm	SPH 1301

FMSC290 **Family Economics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: FMSC290 or FMST290. Formerly: FMST290.

Application of economic methodology to study families under various economic situations. Examination of how decisions about marriage, divorce, fertility, consumption and time use are influenced by labor/housing markets, tax structure, social welfare benefits and other economic considerations.

Restricted to majors or non-majors with less than or equal to 60 credits.

0101	Manouchehr Mokhtari TuTh 5:00pm - 6:15pm	Seats (Total: 65) SPH 1312

FMSC302 **Research Methods in Family Science**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DSSP

Prerequisite: Must have completed an introductory statistics course. Restriction: Must be in a major within SPHL-Family Science department. Credit only granted for: FMSC302 or FMST302. Formerly: FMST302.

Introduction to the methods of the social and behavioral sciences employed in family science. The role of theory, the development of hypotheses, measurement, design, and data analysis.

0101	Ryan Blick TuTh 9:30am - 10:45am	Seats (Total: 75) SPH 1303

FMSC310 **Maternal, Child and Family Health**

Credits: 3 | Grading Method: Regular, Pass-Fail

Credit only granted for: FMSC310, FMSC410 or FMSC498A. Formerly: FMSC498A and FMSC410. Additional information: A comprehensive understanding of maternal, child, and family health, with additional emphasis on environmental health, needs assessment and evaluation, enabling students to more effectively address issues in the workplace.

Overview of the major issues in Maternal, Child, and Family Health in the U.S. and the world. The course will cover the social, political, environmental, and economic factors that shape the health of women, children, and families throughout the life course. It will employ the core disciplines of public health -- 1) epidemiology/biostatistics, 2) environmental health, 3) health policy and administration, and 4) social and behavioral health -- to examine these factors. The course introduces specific issues and interventions and places these issues and interventions within their broad sociohistorical context.

0101	Edmond Shenassa TuTh 2:00pm - 3:15pm	Seats (Total: 56) MCB 1207
0201	Edmond Shenassa TuTh 11:00am - 12:15pm	Seats (Total: 50) SPH 0302
0301	Jessica Gleason MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 50) SPH 0308 ONLINE

FMSC330 **Family Theories and Patterns**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP

Restriction: Junior standing or higher. Credit only granted for: FMSC330 or FMST330. Formerly: FMST330.

Theory and research on the family, including a cross-cultural analysis of family patterns.

0101	Robyn Zeiger MWF 12:00pm - 12:50pm	Seats (Total: 60) SPH 1303
0201	Robyn Zeiger MWF 1:00pm - 1:50pm	Seats (Total: 60) SPH 1303
0301	Samuel Allen TuTh 12:30pm - 1:45pm	Seats (Total: 60) SPH 1301

FMSC332 **Children in Families**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS

Prerequisite: PSYC100 or FMSC105. Credit only granted for: FMSC332 or FMST332. Formerly: FMST332.

A family life education approach to the study of children and families. Emphasis on the interaction of children with parents, siblings, extended kin, and the community.

0101	Amy Lewin TuTh 9:30am - 10:45am	Seats (Total: 60) CCC 1100
0201	Amy Lewin TuTh 12:30pm - 1:45pm	Seats (Total: 60) CCC 1100
0301	Christine Schull Class time/details on ELMs	Seats (Total: 60) ONLINE

FMSC341 **Personal and Family Finance**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Credit only granted for: FMSC341 or FMST341. Formerly: FMST341.

Individual and family financial strategies with emphasis on financial planning, savings, investments, insurance, income taxes, housing, and use of credit. Planning, analyzing, and controlling financial resources to resolve personal/family financial problems and to attain financial security.

0101	Manouchehr Mokhtari TuTh 6:30pm - 7:45pm	Seats (Total: 60) SPH 1312
SG91	William Knight Class time/details on ELMs	Seats (Total: 200) ONLINE
	Restricted to Junior BMGT-Shady Grove students majoring in Marketing and to Senior BMGT-Shady Grove cohort students. Other students may req uest enrollment on a space available basis.	
SG92	William Knight Class time/details on ELMs	Seats (Total: 10) ONLINE
	Registration is restricted to CCJS students at Shady Grove. For additional information, please email usgbiosci@umd.edu.	
SG93	William Knight Class time/details on ELMs	Seats (Total: 22) ONLINE
	Registration is restricted to Biological Sciences- Shady Grove majors. Permission is required for UMCP undergraduate students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.	

FMSC381 **Poverty, Affluence, and Families**

Credits: 3 | Grading Method: Regular, Pass-Fail , D | General Education: DSHS, DVUP

Prerequisite: SOCY100 or SOCY105. Restriction: Must be in a major within SPHL-Family Science department. Credit only granted for: FMSC381 or FMST381. Formerly: FMST381.

Social, political, cultural and economic factors influencing income and wealth in American families.

0101	John Hart MWF 9:00am - 9:50am	Seats (Total: 60) SPH 1301
0201	Laura Golojuch TuTh 3:30pm - 4:45pm	Seats (Total: 60) SPH 1301

FMSC383 **Delivery of Human Services to Families**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FMSC330. Restriction: Must be in a major within SPHL-Family Science department. Credit only granted for: FMSC383 or FMST383. Formerly: FMST383.

Processes of service delivery with special emphasis upon relationships among managers, service providers and clients. The impact of human service systems on families.

0101	Allyson Pakstis, Ghaffar Hurtado Choque	Seats (Total: 65)
	MWF 11:00am - 11:50am	SPH 1303

FMSC399 **Independent Study**

(Perm req)

Credits: 1-6

Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

FMSC420 **African American Families**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Recommended: FMSC330. Credit only granted for: FMSC420 or FMSC498F. Formerly: FMSC498F.

Examination of the history, structure, cultural foundation, and diversity of African American family life is the focus of this class. Presentations and discussions enable students to identify, analyze, and assess: (1) the major theoretical perspectives used in the study of African American families; (2) the impact of social policy on African American families; and (3) specific areas of family life (e.g., marriage and divorce, parenting, child development, health disparities).

0101	Mia A Smith-Bynum	Seats (Total: 40)
	TuTh 9:30am - 10:45am	SPH 1301

FMSC431 **Family Crises and Intervention**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100. Credit only granted for: FMSC431 or FMST431. Formerly: FMST431.

Family crises such as divorce, disability, substance abuse, financial problems, intra-familial abuse, and death. Theories and techniques for intervention and enhancement of family coping strategies.

0201	Haedong Kim	Seats (Total: 50)
	TuTh 11:00am - 12:15pm	SPH 1302

FMSC432 **Adult Development and Aging in Families**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100; and (SOCY100 or SOCY105). And FMSC332; or must have completed a comparable development course. Restriction: Must be in a major within SPHL-Family Science department. Credit only granted for: FMSC432 or FMST432. Formerly: FMST432.

Theory, research, history, and programming related to adult development and aging in the intergenerational context of family.

0101	Jessica Fish MWF 10:00am - 10:50am	Seats (Total: 40) CHM 1224
0201	Christine Schull MW 9:00am - 9:50am F 9:00am - 9:50am	Seats (Total: 40) SPH 1303 ONLINE

FMSC460 **Violence in Families**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DVUP

Prerequisite: SOCY100, SOCY105, or PSYC100. Credit only granted for: FMSC460 or FMST460. Formerly: FMST460.

Theories of child, spouse, and elder abuse in the family setting. Emphasis on historical, psychological, sociological and legal trends relating to physical, emotional, and sexual abuse. Introduction to methods for prevention and remediation.

0101	Christine Schull MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 56) SPH 1301 ONLINE

FMSC477 **Internship and Analysis in Family Science**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: FMSC383; and 9 credits in FMSC courses; and permission of SPHL-Family Science department. Restriction: Must be in a major within SPHL-Family Science department. Credit only granted for: FMSC477, FMST347, or FMST477. Formerly: FMST477.

A supervised internship and a seminar requiring analysis. Opportunities to integrate theory and practice including 120 hours of contracted field experience. Summer or fall internship contracts due May 1; Spring contracts due December 1. See department for application procedures.

Click here for Application Deadlines and additional details..

0101	Ashley Pantaleao W 3:30pm - 5:00pm Contact instructor or department for details.	Seats (Total: 100) KEB 1110

FMSC485 **Introduction to Family Therapy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FMSC330; or 1 course from PSYC300-499 course range. Credit only granted for: FMSC485 or FMST485. Formerly: FMST485.

The fundamental theoretical concepts and clinical procedures of marital and family therapy including premarital and divorce therapy issues.

0101	Patricia Barros Th 12:30pm - 3:00pm	Seats (Total: 45) CCC 1111

FMSC487 **Legal Aspects of Family Problems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: FMSC487 or FMST487. Formerly: FMST487.

Laws and legal procedures, with emphasis on adoption, marriage, divorce, annulment, and property rights, and how they affect family life.

0101	Kerry Tripp TuTh 11:00am - 12:15pm	Seats (Total: 50) SPH 1303
0201	Kerry Tripp TuTh 8:00am - 9:15am	Seats (Total: 25) SPH 0303

FMSC498 **Special Topics: Family Science; Family Studies**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Special course topics in family studies.

Contact department for information to register for this course.

FMSC498H **Special Topics: Family Science; Family Studies Honors Thesis**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Special course topics in family studies.

Contact department for information to register for this course.

FMSC498M **Special Topics: Family Science; Theory and Techniques of Family Mediation**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special course topics in family studies.

Introduction to family mediation as an approach to helping families deal effectively with the issues associated with separation and divorce. Theory, practice, and techniques of negotiation, with an emphasis on custody, property division, and constructive restructuring of family relationships.

0101	Kerry Tripp	Seats (Total: 40)
	Th 12:30pm - 3:00pm	SPH 1302

FMSC610 **Research Methods in Family Science**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: EDMS645; or students who have taken courses with comparable content may contact the department. Credit only granted for: FMSC610 or FMST610. Formerly: FMST610.

Research methods in family science. The role of theory, design, use of qualitative and quantitative measurement techniques, data collection and data analysis. Development of research proposals.

0101	Mona Mittal	Seats (Total: 15)
	Th 1:00pm - 3:45pm	Location: TBA

FMSC612 **Reproductive and Perinatal Epidemiology**

Credits: 3

Grading Method: Regular

Prerequisite: Must have completed a graduate course in epidemiology with a B- or higher.

Focuses on current research, controversial issues and methodological problems in the epidemiology of reproductive and perinatal health. Includes a critical review in the broader context of reproductive and perinatal health within families and communities.

0101	Marie Thoma	Seats (Total: 12)
	Tu 1:00pm - 3:45pm	Location: TBA

FMSC641 **Couples Therapy, Theory, and Techniques**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: FMSC640. Credit only granted for: FMSC641 or FMSC641. Formerly: FMST641.

Overview of theoretical models of couple relationships and methods of facilitating growth and interaction within those relationships. Emphasis on couples with conflicting needs and expectations, and dysfunctional communication and conflict negotiation skills.

0101	Norman Epstein Th 9:00am - 11:45am	Seats (Total: 15) Location: TBA

FMSC642 **Normal and Abnormal Individual and Family Development**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: FMSC640. Credit only granted for: FMSC642 or FMST642. Formerly: FMST642.

Normal development and psychopathology in the family system. Emphasis o parent-child relationships and application of the current Diagnostic and Statistical Manual of Mental Disorders (DSM) to family therapy.

0101	Elise Resnick Tu 1:00pm - 3:45pm	Seats (Total: 15) Location: TBA

FMSC647 **Theory and Techniques of Family Mediation**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: FMSC647 or FMST647. Formerly: FMST647.

An introduction to family mediation as an approach to helping families deal effectively with the issues associated with separation and divorce. Theory, practice, and techniques of negotiation, with an emphasis on custody, property division, and the constructive restructuring of family relationships.

0101	Kerry Tripp Th 12:30pm - 3:00pm	Seats (Total: 40) SPH 1302

FMSC651 **Psychopathology in the Family Context**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: FMSC650. Restriction: Must be in Couple and Family Therapy (Master's) program. Credit only granted for: FMSC651 or FMST651. Formerly: FMST651.

Diagnosis and treatment of psychopathology within the family context, with application of various family therapy models.

0101	Leigh Leslie	Seats (Total: 15)
	Tu 9:00am - 11:45am Contact instructor or department for details.	Location: TBA

FMSC653 **Advanced Application of MFT Models and Techniques**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: FMSC652. Restriction: Must be in Couple and Family Therapy (Master's) program. Credit only granted for: FMSC653 or FMST653. Formerly: FMSC653.

Advanced application and integration of family therapy skills and theoretical models in the practice of marriage and family therapy. Emphasis on treatment plans from different therapeutic models demonstrated in case presentations and supervision of therapy.

0101	Patricia Barros	Seats (Total: 15)
	Tu 9:00am - 11:45am Contact instructor or department for details.	Location: TBA

FMSC658 **Supervised Clinical Practice of Marriage and Family Therapy; Theory and Practice of Clinical Supervision**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

The supervision of marriage and family therapy client contact. Various family systems models of supervision applied via extant methods, including live, videotaped, and audiotaped.

0101	Mona Mittal	Seats (Total: 20)
	W 9:00am - 11:45am	Location: TBA

FMSC689 **Research Internship**

(Perm req)

Credits: 3 Grading Method: Regular

Research experience resulting in a scholarly article suitable for publication in a peer-reviewed journal.

Contact department for information to register for this course.

FMSC698 **Advanced Topics in Family Science**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Arranged group study on specific topic which may vary from term to term.

Must have written permission of faculty member and chairperson.

Contact department for information to register for this course.

FMSC699 **Independent Study**

(Perm req)

Credits: 1-6

Grading Method: Regular, Audit

Contact department for information to register for this course.

FMSC730 **Key Topics in Maternal and Child Health**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of instructor.

Review of key issues on the frontier of maternal and child health research and practice within broad public health and socio-cultural context. Examines current maternal and child health issues such as ethics, child and family health, health and socioeconomic disparities, child nutrition and obesity, military family health, and global health.

0101	Marian Jones	Seats (Total: 15)
	M 1:30pm - 4:15pm	Location: TBA

FMSC789 **Non-Thesis Research**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Non-thesis option research papers.

Contact department for information to register for this course.

FMSC799 **Master's Thesis Research**

(Perm req)

Credits: 1-6

Grading Method: Regular

Must have written permission of faculty member and chairperson.

Contact department for information to register for this course.

FMSC850 **Maternal & Child Health Epidemiology**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of instructor. Credit only granted for: FMSC850, FMST698P, or FMST850. Formerly: FMST850.

Determinants and trends in Maternal and Child Health, including analysi of the role of economic inequalities, race and ethnicity, community contexts, and psychosocial factors across the life course. Overview of methods and data systems used to monitor Maternal and Child Health. Development of a complete population health study.

0101	Julia Steinberg	Seats (Total: 15)
	Th 1:00pm - 3:45pm	Location: TBA

FMSC879 **Preparing Future Faculty and Professionals Seminar**

Credits: 1

Grading Method: Regular

Development of skills necessary to obtain and succeed in academic and non-academic positions in family science and public health. Topics include: career mapping, networking, teaching/teaching portfolios, independent research, publishing, grant writing, program and policy evaluation, consulting, job search, interviewing and negotiation, mentoring, diversity, work-family balance, and ethical issues in the workplace. Periodic visits to universities and government/nonprofit employers.

0101	Sandra Quinn	Seats (Total: 30)
	W 1:00pm - 1:50pm	Location: TBA

FMSC898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

FMSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

FREN French Spring 2019

FREN103 **Intensive Elementary French**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not have completed FREN102; and must not be a native/fluent speaker of French. Credit only granted for: FREN102 or FREN103.

Covers speaking, reading, writing, listening, and culture of French-speaking world.

0101	Callan Roten MWF 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 25) JMZ 2122 ONLINE
0201	Inaam Ngadi MWF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) JMZ 0208 ONLINE
0301	Morgan McMahon MWF 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 25) JMZ 1117 ONLINE

FREN203 **Intensive Intermediate French**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: FREN103; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a native/fluent speaker of French. Credit only granted for: FREN201 or FREN203.

Covers speaking, reading, writing, listening, and culture of French-speaking world.

0101	Catherine Favier-Kelly MWF 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 25) JMZ 2123 ONLINE
0201	Elizabeth Robinson MWF 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 25) JMZ 3120 ONLINE
0301	Leandra Cormier MWF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 25) JMZ 2123 ONLINE
0401	Jillian Bruns MWF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) JMZ 2120 ONLINE

FREN204 **French Grammar and Composition**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: FREN201 or FREN203; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Not open to native/fluent speakers of French.

Intensive study of French grammar and composition.

0101	Cae Joseph-Massena MWF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 25) JMZ 3205 ONLINE
0201	Cae Joseph-Massena MWF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) JMZ 2207 ONLINE

FREN211 **French Reading and Conversation**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: FREN201 or FREN203. Restriction: Must not be a native/fluent speaker of French.

Practice in spoken French at intermediate level based on readings in a variety of genres. Written homework and exams.

Contact department for information to register for this course.

FREN241 **Women Writers of French Expression in Translation**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU

Works and ideas of 20th century women writers of French in Canada, Africa, the Caribbean and France. Taught in English.

Contact department for information to register for this course.

FREN242 **Francophone Writers of Africa and the African Diaspora**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU, DVUP

An analysis of the works and ideas of 20th and 21st century Francophone writers (Africa, the Caribbeans, France). Taught in English.

Also offered as CMLT298B. Credit granted for FREN242 or CMLT298B.

0101	Valerie Orlando MW 2:00pm - 3:15pm	Seats (Total: 30) JMZ 2122

FREN250 **Introduction to Cultural and Textual Analysis**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL | General Education: DSHU

Prerequisite: FREN204; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French. Credit only granted for: FREN250 or FREN250H.

Introduction to cultural and textual analysis of selected readings from various genres in French literature. Taught in French.

Also offered as FREN250H. Credit granted for FREN250 or FREN250H.

0101	Erica Cefalo MWF 11:00am - 11:50am	Seats (Total: 25) JMZ 1122
0201	Joseph Brami MWF 1:00pm - 1:50pm	Seats (Total: 25) JMZ 3120

FREN250H **Introduction to Cultural and Textual Analysis**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL | General Education: DSHU

Prerequisite: FREN204; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French. Credit only granted for: FREN250 or FREN250H.

Introduction to cultural and textual analysis of selected readings from various genres in French literature. Taught in French.

For general honors students only. Also offered as FREN250. Credit granted for FREN250 or FREN250H.

0101	Erica Cefalo MWF 11:00am - 11:50am	Seats (Total: 25) JMZ 1122
0201	Joseph Brami MWF 1:00pm - 1:50pm	Seats (Total: 25) JMZ 3120

FREN269C **Special Topics in Study Abroad II; La Chason Francaise: Then and Now**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

FREN269F **Special Topics in Study Abroad II; French Conversation I**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

FREN269G **Special Topics in Study Abroad II; French Conversation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

FREN269L **Special Topics in Study Abroad II; LANGUAGE AND CINEMA**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

FREN269P **Special Topics in Study Abroad II; Perspectives on Contemporary France**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

FREN269Z **Special Topics in Study Abroad II; Third-Year French II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

FREN301 **Composition and Style**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN250; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French.

Grammatical analysis, elements of style; range of written genres.

0101	Charlee Bezilla TuTh 11:00am - 12:15pm	Seats (Total: 20) JMZ 2117
0201	Hannah Wegmann MW 3:30pm - 4:45pm	Seats (Total: 20) JMZ 1117

FREN302 **Translation: French to English**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

Practicum in translation primarily from French to English; contrastive analysis.

0101	Mercedes Baillargeon TuTh 11:00am - 12:15pm	Seats (Total: 20) JMZ 1120

FREN306 **Commercial French I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

Introduction to commercial French including correspondence and business terminology. Emphasis on cross-cultural concepts needed for successful interaction within business settings. Taught in French.

Taught in French.

0101	Erica Cefalo MWF 12:00pm - 12:50pm	Seats (Total: 20) JMZ 0122

FREN311 **Advanced Oral Expression**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN250; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French.

Linguistic and thematic analysis of written, audio, and visual texts. Focus on aural and oral skills. Some written assignments and evaluation.

Contact department for information to register for this course.

FREN312 **France Today**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French.

Analysis and discussion of current events and institutions using variou French media resources.

Contact department for information to register for this course.

FREN351 **From Romanticism to the Age of Modernism and Beyond**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

A survey of the chief authors and major movements of French literature from Pre-Romanticism to the present.

Contact department for information to register for this course.

FREN352 **From the Age of Epic and Romance to the Enlightenment**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

A survey of the chief authors and major movements of French literature from the Middle Ages to the end of the 18th century.

Also offered as FREN352H. Credit granted for FREN352 or FREN352H.

0101	Herve Campangne	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	JMZ 1215

FREN352H **From the Age of Epic and Romance to the Enlightenment**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

A survey of the chief authors and major movements of French literature from the Middle Ages to the end of the 18th century.

For general honors students only. Also offered as FREN352. Credit grante d for FREN352 or FREN352H.

0101	Herve Campangne	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	JMZ 1215

FREN369F **Special Topics in Study Abroad III; Third-Year French I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

FREN369G **Special Topics in Study Abroad III; Third-Year French II**

Credits: 1-6

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

FREN369Y **Special Topics in Study Abroad III; Fourth-Year French I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

FREN386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Prerequisite: Permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

FREN387 **Critical Writing on France and the French-Speaking World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN301. Restriction: Not open to Native speakers.

Intensive writing course based on focused study of issues and concerns drawn from French and Francophone literatures, films, and cultures. Elements of style, review of grammar. Taught in French.

Includes a Focus on writing from characters' points of view: The short story.

0101	Joseph Brami	Seats (Total: 20)
	MW 2:00pm - 3:15pm	JMZ 2117

FREN399 **Directed Study in French**

(Perm req)

Credits: 1-3 Grading Method: Regular

Advanced undergraduates develop syllabus, reading list, and course requirements with interested faculty member. Designed for in-depth study of material not offered in regular courses or as expansion of course material. To be planned during semester preceding registration.

Supervised work under professor of student's choice with permission of instructor. Contact department for details.

Contact department for information to register for this course.

FREN399A **Directed Study in French**

Credits: 3 Grading Method: Regular

Advanced undergraduates develop syllabus, reading list, and course requirements with interested faculty member. Designed for in-depth study of material not offered in regular courses or as expansion of course material. To be planned during semester preceding registration.

Contact department for information to register for this course.

FREN399B **Directed Study in French; Directed Study in Nice II**

Credits: 1-3 Grading Method: Regular

Advanced undergraduates develop syllabus, reading list, and course requirements with interested faculty member. Designed for in-depth study of material not offered in regular courses or as expansion of course material. To be planned during semester preceding registration.

Contact department for information to register for this course.

FREN423 **Women and French Cinema**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: FREN387; or permission of ARHU-French & Italian Languages & Literatures department. Also offered as: FILM423. Credit only granted for: FREN423 or FILM423.

Cultural identity, social boundaries and gender roles in French film as well as introduction to film textual analysis and diverse film theories (semiotics, film and psychoanalysis, feminist film theory, structuralism, narratology, spectatorship and cultural studies). Taught in French.

0101	Caroline Eades	Seats (Total: 30)
	MW 2:00pm - 3:15pm	JMZ 0122

FREN495H **Honors Thesis Research**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be admitted to the departmental honors program.

The writing of a paper under the direction of a professor in this department and an oral examination. Required to fulfill the departmental honors requirement.

Contact department for information to register for this course.

FREN498C **Special Topics in French Literature; The Changing Face of France: Immigration, Integration and National Identity**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Selected topics in French literature.

Prerequisites: FREN387 and FREN351 or FREN352; or Permission of ARHU-French & Italian Languages & Literatures department. In this course, we will study the relationship between cultural productions (mostly literature and film) and society to better understand how ideology, values, and national identity can be either reproduced or subverted. We will focus mainly on recent representations of race, class, and gender, especially in the case of immigration and of "les banlieues" in films and novels from 1995 to today. Taught in French.

0101	Mercedes Baillargeon	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	JMZ 0122

FREN499X **Special Topics in French Studies; Directed Study in French**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

An aspect of French studies, the specific topic to be announced each time the course is offered.

Contact department for information to register for this course.

FREN699O **Seminar; The Algerian Novel: 1900-the 2000s**

Credits: 3 Grading Method: Regular, Audit

Topic to be determined each semester.

This course studies the evolution of Algerian writing from the colonial to postcolonial era. Taught in French.

0101	Valerie Orlando M 4:30pm - 7:15pm	Seats (Total: 10) JMZ 3205

FREN699P **Seminar; Travel Narratives from Cartier to Tocqueville**

Credits: 3 Grading Method: Regular, Audit

Topic to be determined each semester.

This course studies the transformations of the travel narrative genre from the sixteenth century onto the early nineteenth century. Taught in French.

0101	Herve Campangne Tu 4:30pm - 7:15pm	Seats (Total: 10) JMZ 3203

FREN699Z **Seminar; Nuclear Futures: Theorizing Environmental Humanities for the Post-Fukushima Age**

Credits: 3 Grading Method: Regular, Audit

Topic to be determined each semester.

Also offered as GERM689Z, SLLC698Z and CMLT679Z. Credit granted for FREN699Z, GERM689Z, SLLC698Z, or CMLT679Z. This seminar interrogates the concept of futurity in the context of environmental activism and artistic engagement with atomic issues from 1945 to the present, focusing on Germany and Japan. We will engage with theoretical developments in the environmental humanities, including readings on the Anthropocene, precarity, and neoliberal capitalism. The course draws on a wide range of written materials and media, including personal testimonies, poetry, fiction, film, manga, music, performance and documentation of protests. Taught in English.

0101	Hester Baer, Michele Mason W 4:30pm - 7:00pm	Seats (Total: 20) JMZ 3203

FREN798 **Master's Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

FREN799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

FREN889 **Doctoral Independent Study**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

FREN898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

FREN899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

GEMS Gemstone Spring 2019

GEMS102 **Research Topic Exploration and Team Formation**

Credits: 1 Grading Method: Regular

Restriction: Must be in the Gemstone program.

Under the guidance of staff and visiting speakers, students will develop research topics that they will pursue for the remainder of their participation in the Gemstone program, and form into interdisciplinary teams around these topics.

0101	Kristan Skendall	Seats (Total: 180)
	Th 5:00pm - 6:00pm	EGR 1202

GEMS104 **Topics in Science, Technology and Society (STS)**

Credits: 3 Grading Method: Regular, Audit CORE: IE General Education: DSHS, DSHU, DSSP, SCIS

Prerequisite: GEMS100. Restriction: Must be in the Gemstone program.

An examination of how cultural, economic, political and social forces shape scientific and technological systems and, conversely, how scientific and technological systems have affected the culture, economies, organization and politics of societies. Students in the course will form small teams to carry out semester-long research on socio/technical topics related to the course theme chosen for that specific semester.

0101	Leah Kreimer Tobin, Frank Coale Tu 5:00pm - 6:15pm W 1:00pm - 2:15pm	Seats (Total: 10) ESJ 0224 ELL 0100A	Discussion
0102	Leah Kreimer Tobin, Frank Coale Tu 5:00pm - 6:15pm W 12:00pm - 1:15pm	Seats (Total: 12) ESJ 0224 ELL 0100D	Discussion
0103	Frank Coale, Leah Kreimer Tobin Tu 5:00pm - 6:15pm W 3:00pm - 4:15pm	Seats (Total: 13) ESJ 0224 ELL 0100D	Discussion
0104	Leah Kreimer Tobin, Frank Coale Tu 5:00pm - 6:15pm Th 11:00am - 12:15pm	Seats (Total: 13) ESJ 0224 ELL 0100A	Discussion
0105	Leah Kreimer Tobin, Frank Coale Tu 5:00pm - 6:15pm Th 9:30am - 10:45am	Seats (Total: 10) ESJ 0224 ELL 0100D	Discussion
0106	Leah Kreimer Tobin, Frank Coale Tu 5:00pm - 6:15pm Th 2:00pm - 3:15pm	Seats (Total: 13) ESJ 0224 ELL 0100D	Discussion
0107	Leah Kreimer Tobin, Frank Coale Tu 5:00pm - 6:15pm F 10:00am - 11:15am	Seats (Total: 12) ESJ 0224 ELL 0100A	Discussion
0108	Leah Kreimer Tobin, Frank Coale Tu 5:00pm - 6:15pm Th 9:30am - 10:45am	Seats (Total: 10) ESJ 0224 ELL 0102	Discussion
0109	Leah Kreimer Tobin, Frank Coale Tu 5:00pm - 6:15pm F 12:00pm - 1:15pm	Seats (Total: 12) ESJ 0224 ELL 0100A	Discussion

0110	Frank Coale, Leah Kreimer Tobin Tu 5:00pm - 6:15pm Th 9:00am - 10:15am	Seats (Total: 13) ESJ 0224 ELL 0100A	Discussion
0111	Frank Coale, Leah Kreimer Tobin Tu 5:00pm - 6:15pm Th 11:00am - 12:15pm	Seats (Total: 10) ESJ 0224 ELL 0100B	Discussion
0112	Leah Kreimer Tobin, Frank Coale Tu 5:00pm - 6:15pm F 2:00pm - 3:15pm	Seats (Total: 13) ESJ 0224 ELL 0100D	Discussion
0113	Frank Coale, Leah Kreimer Tobin Tu 5:00pm - 6:15pm W 2:00pm - 3:15pm	Seats (Total: 10) ESJ 0224 ELL 0100B	Discussion
0114	Frank Coale, Leah Kreimer Tobin Tu 5:00pm - 6:15pm F 9:30am - 10:45am	Seats (Total: 10) ESJ 0224 ELL 0100D	Discussion
0115	Frank Coale, Leah Kreimer Tobin Tu 5:00pm - 6:15pm Th 2:30pm - 3:45pm	Seats (Total: 10) ESJ 0224 ELL 0100A	Discussion
0116	Frank Coale, Leah Kreimer Tobin Tu 5:00pm - 6:15pm F 11:00am - 12:15pm	Seats (Total: 12) ESJ 0224 ELL 0102	Discussion

GEMS208E **Special Topics in Leadership and Team Development; Research Topic Exploration Teaching Freshmen First Time Section Leader**

Credits: 1-3 Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with a emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Kristan Skendall Contact instructor or department for details.	Seats (Total: 18)

GEMS208F **Special Topics in Leadership and Team Development; Research Topic Exploration Teaching Freshmen: Returner Section Leader**

Credits: 1-3

Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with a emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

Restricted to Gemstone Students.

0201	Kristan Skendall	Seats (Total: 12)
	Contact instructor or department for details.	

GEMS208G **Special Topics in Leadership and Team Development; Science, Technology and Society Teaching Freshmen First Time Section Leader**

Credits: 1-3

Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with a emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Leah Kreimer Tobin	Seats (Total: 13)
	Contact instructor or department for details.	

GEMS208I **Special Topics in Leadership and Team Development; Science, Technology & Society Teaching Freshman, Returnee Section Leader**

Credits: 1-3

Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with a emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Leah Kreimer Tobin	Seats (Total: 14)
	Contact instructor or department for details.	

GEMS208J **Special Topics in Leadership and Team Development; Gems Camp**

Credits: 1-3

Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with a emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Jessica Lee	Seats (Total: 12)
	Contact instructor or department for details.	

GEMS208K **Special Topics in Leadership and Team Development; GEMS Connect**

Credits: 1-3 Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with a emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Jessica Lee	Seats (Total: 30)
	Contact instructor or department for details.	

GEMS208L **Special Topics in Leadership and Team Development; GEMS GSC Executive Board**

Credits: 1-3 Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with a emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Jessica Lee	Seats (Total: 6)
	Contact instructor or department for details.	

GEMS208T **Special Topics in Leadership and Team Development; Thesis Conference Planning Team**

Credits: 1 Grading Method: Regular, Audit

Principles, methods and types of leadership and team development with a emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Kristan Skendall, Leah Kreimer Tobin	Seats (Total: 7)
	Contact instructor or department for details.	

GEMS296 **Team Project Seminar I**

Credits: 1 Grading Method: Regular

Prerequisite: GEMS100, GEMS102, and GEMS104. Corequisite: GEMS202. Restriction: Must be in the Gemstone program with sophomore standing in a research team.

This is the first of six seminars during which Gemstone students carry out multidisciplinary research with the guidance of a faculty mentor. The teams develop their working relationship, start their literature search, define their research question, and set short & long term goals.

0113	Kristan Skendall Contact instructor or department for details.	Seats (Total: 5)

GEMS297 **Team Project Seminar II**

Credits: 2 Grading Method: Regular

Restriction: Must be in the Gemstone program with sophomore standing in a research team.

This is the second of six seminars during which Gemstone students carry out interdisciplinary research with the guidance of a faculty mentor. The team develops its website, prepares and presents its research proposal and begins its research project.

Restricted to Gemstone Students.

0101	Nishanth Sunny M 8:00am - 8:50am Th 7:00pm - 7:50pm	Seats (Total: 14) ANS 3105 ESJ 1309
0102	Anil Deane Th 5:30pm - 6:30pm M 6:30pm - 7:30pm	Seats (Total: 14) HBK 0125 HBK 0125
0103	Natasha Almeida e Andrade M 4:00pm - 4:50pm W 8:00am - 8:50am	Seats (Total: 14) EGR 1134S EGR 1179
0104	Giuliano Scarcelli M 6:00pm - 6:50pm Su 3:00pm - 3:50pm	Seats (Total: 14) AJC 3104 AJC 3104
0105	Kenneth Frauwirth W 6:30pm - 8:30pm	Seats (Total: 14) MCB 1121

0106	Bryan Quinn Tu 3:45pm - 4:35pm Th 3:45pm - 4:35pm	Seats (Total: 14) EGR 1102 EGR 1102
0107	Mary Bowden M 4:00pm - 4:50pm Tu 6:00pm - 6:50pm	Seats (Total: 14) Location: TBA JMZ 1224
0108	Wilbur Hadden M 6:15pm - 7:15pm W 12:00pm - 12:50pm	Seats (Total: 14) ESJ B0320 ESJ B0320
0109	Jae Kun Shim F 3:00pm - 3:50pm M 6:30pm - 7:20pm *The Friday lecture will meet in the Technology Advancement Program Building (TAP) in the Northrop Grumman Collaboration Space.*	Seats (Total: 14) SPH 0110F Location: TBA
0110	Birthe Kjellerup Tu 5:00pm - 5:50pm M 9:00pm - 9:50pm	Seats (Total: 14) EGR 1179 ESJ 1212
0111	Aravind Srinivasan F 4:30pm - 5:30pm M 5:00pm - 5:50pm	Seats (Total: 14) AVW 3258 ESJ B0320
0112	John Daristotle F 3:00pm - 3:50pm W 8:00pm - 8:50pm	Seats (Total: 14) KEB 1200 MTH 0303
0113	Kristan Skendall Contact instructor or department for details.	Seats (Total: 5)

GEMS396 **Team Project Seminar III**

Credits: 2 Grading Method: Regular

Prerequisite: GEMS297. Restriction: Must be in the Gemstone program with junior standing in a research team.

This is the third of six seminars during which Gemstone students carry out interdisciplinary research with the guidance of a faculty mentor. The team presents its progress at the Gemstone Colloquia.

0113	Kristan Skendall Contact instructor or department for details.	Seats (Total: 5)

GEMS397 **Team Project Seminar IV**

Credits: 2 Grading Method: Regular

Prerequisite: GEMS396. Restriction: Must be in the Gemstone program with junior standing in a research team.

This is the fourth of six seminars during which Gemstone students carry out interdisciplinary research with the guidance of a faculty mentor. The team further develops its website. Also they will prepare and present the team project in the poster session of Undergraduate Research Day.

Restricted to Gemstone Students.

0101	Matthias Zwicker M 1:00pm - 1:50pm F 8:00am - 8:50am	Seats (Total: 14) Location: TBA Location: TBA
0102	Kevin Knapstein Tu 5:00pm - 7:00pm	Seats (Total: 14) Location: TBA
0103	Mohamad Al-Sheikhly Tu 5:00pm - 5:50pm Th 10:00pm - 10:50pm	Seats (Total: 14) Location: TBA Location: TBA
0104	Jose Aranda-Espinoza W 8:00am - 8:50am M 8:00am - 8:50am	Seats (Total: 14) ESJ 1212 AJC 3104
0105	Joanna Goger Tu 8:30am - 9:20am Th 8:15am - 9:05am	Seats (Total: 14) HJP 2242 SYM 0215
0106	Bao Yang W 5:00pm - 5:50pm Th 8:00am - 8:50am	Seats (Total: 14) EGR 0159 EGR 0159
0107	Ashok Agrawala Th 1:00pm - 1:50pm F 6:00pm - 6:50pm	Seats (Total: 14) Location: TBA Location: TBA

0108	Sean Barnes, Margret Bjarnadottir Tu 3:30pm - 4:30pm Th 3:30pm - 4:30pm	Seats (Total: 14) VMH 4534 PHY 4222
0109	Anil Deane Tu 6:00pm - 6:50pm W 1:00pm - 1:50pm	Seats (Total: 14) ATL 4301 ATL 4354
0110	Lester Schultheis M 9:00am - 9:50am M 5:00pm - 5:50pm	Seats (Total: 14) JMZ 0120 JMZ 0120
0111	David Akin M 5:00pm - 5:50pm W 5:15pm - 6:15pm	Seats (Total: 14) Location: TBA Location: TBA
0113	Kristan Skendall Contact instructor or department for details.	Seats (Total: 5)

GEMS496 **Project Writing Seminar**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: GEMS397. Restriction: Must be in the Gemstone program.

This is the fifth of six seminars during which Gemstone students carry out research with the guidance of a faculty mentor. The team finishes the analysis of their data and writes and edits its team thesis.

0113	Kristan Skendall Contact instructor or department for details.	Seats (Total: 5)

GEMS497 **Team Thesis Defense**

Credits: 2 Grading Method: Regular General Education: DSSP

Prerequisite: GEMS396. Restriction: Must be in the Gemstone program.

Gemstone teams will complete the team research project and thesis. The team will formally present the thesis to experts in the area of interest at a Team Thesis Conference before final submission.

Restricted to Gemstone Students.

0101	Robert Newcomb Tu 6:00pm - 6:50pm Tu 5:00pm - 5:50pm	Seats (Total: 14) AVW 2328 AVW 2328
0102	Stephen Penny M 6:00pm - 6:50pm W 6:00pm - 6:50pm	Seats (Total: 14) ESJ 1212 ESJ 1212
0103	Kaye Brubaker W 12:00pm - 12:50pm W 7:00pm - 7:50pm	Seats (Total: 14) PLS 1168 PLS 1168
0104	Min Ouyang F 5:00pm - 5:50pm Th 5:00pm - 5:50pm	Seats (Total: 14) Location: TBA Location: TBA
0105	Ryan Sochol M 9:00am - 10:00am W 5:30pm - 6:30pm	Seats (Total: 14) Location: TBA Location: TBA
0106	Debabrata Biswas M 8:00pm - 8:50pm Th 8:00am - 8:50am	Seats (Total: 14) JMZ 1122 JMZ 1122
0107	Kennedy Paynter Tu 3:30pm - 4:30pm Th 4:30pm - 5:30pm	Seats (Total: 14) Location: TBA Location: TBA
0108	Jin-Oh Hahn M 6:30pm - 7:30pm Tu 5:30pm - 6:30pm	Seats (Total: 14) Location: TBA JMZ 0118
0109	David Akin W 3:30pm - 5:30pm	Seats (Total: 14) ESJ B0320
0110	Raymond Adomaitis M 8:00am - 8:50am W 6:00pm - 6:50pm	Seats (Total: 14) AJC 1224 AJC 1224

0111	Pamela Abshire M 7:35pm - 8:35pm W 11:00am - 11:50am	Seats (Total: 14) Location: TBA Location: TBA	
0113	Kristan Skendall Contact instructor or department for details.	Seats (Total: 5)	

GEOG Geographical Sciences Spring 2019

GEOG130 Developing Countries

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB, D | General Education: DSHS, DSSP

An introduction to the geographic characteristics of the development problems and prospects of developing countries. Spatial distribution of poverty, employment, migration and urban growth, agricultural productivity, rural development, policies and international trade. Portraits of selected developing countries.

0101	Ronald Luna MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 24) LEF 2205 LEF 1220	Discussion
0102	Ronald Luna MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 24) LEF 2205 LEF 1220	Discussion
0103	Ronald Luna MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 24) LEF 2205 LEF 1220	Discussion
0104	Ronald Luna MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 24) LEF 2205 LEF 1171	Discussion
0105	Ronald Luna MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 24) LEF 2205 LEF 1171	Discussion
0106	Ronald Luna MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 24) LEF 2205 WDS 0104	Discussion

0107	Ronald Luna MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 24) LEF 2205 LEF 1171	Discussion
0108	Ronald Luna MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 24) LEF 2205 TYD 0111	Discussion
0109	Ronald Luna MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 24) LEF 2205 SQH 1111	Discussion
0110	Ronald Luna MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 24) LEF 2205 LEF 1171	Discussion

GEOG140 **Natural Disasters: Earthquakes, Floods, and Fires**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: PS	General Education: DSNS, SCIS

Catastrophic Environmental Events (CCE) that are becoming more common i this time of global environmental change and it is essential that today's students be equipped with the knowledge and skills to be leaders as we, as a society, understand the upheaval that these CCEs are causing. Students will examine how CEEs shape human society and ecosystem from the interdisciplinary perspective afforded by the field of Geography. Students will use the latest geographic science concepts and techniques in exploring these events. Using satellite imagery they will gain a multi-scale perspective of the ecological and societal aspects of the events.

0101	Keith Yearwood MW 10:00am - 10:50am Th 11:00am - 11:50am	Seats (Total: 25) SPH 1312 JMZ 0120	Discussion
0102	Keith Yearwood MW 10:00am - 10:50am Th 9:30am - 10:20am	Seats (Total: 25) SPH 1312 JMZ 1120	Discussion
0103	Keith Yearwood MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) SPH 1312 HBK 0125	Discussion

0104	Keith Yearwood MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 25) SPH 1312 JMZ 0120	Discussion
0105	Keith Yearwood MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) SPH 1312 LEF 1201	Discussion
0106	Keith Yearwood MW 10:00am - 10:50am Th 9:30am - 10:20am	Seats (Total: 25) SPH 1312 LEF 1201	Discussion

GEOG201 **Geography of Environmental Systems**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with GEOG211)

A systematic introduction to the processes and associated forms of the atmosphere and earth's surfaces emphasizing the interaction between climatology, hydrology and geomorphology.

0101	Keith Yearwood TuTh 9:30am - 10:45am	Seats (Total: 240) ESJ 0202

GEOG202 **Introduction to Human Geography**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS, DVCC

Introduction to what geographers do and how they do it. Systematic stud of issues regarding social and cultural systems from a global to a local scale. Looks at the distribution of these variables and answers the question "Why here, and not there"?

0101	Joshua Wayland MW 1:00pm - 1:50pm F 9:00am - 9:50am	Seats (Total: 25) LEF 2205 TYD 1108	Discussion
0102	Joshua Wayland MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 25) LEF 2205 LEF 1201	Discussion
0103	Joshua Wayland MW 1:00pm - 1:50pm Th 9:30am - 10:20am	Seats (Total: 25) LEF 2205 SQH 1123	Discussion

0104	Joshua Wayland MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	Seats (Total: 25) LEF 2205 KEY 0100	Discussion

GEOG211 **Geography of Environmental Systems Laboratory**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in GEOL120, GEOL100, or GEOG201.

A laboratory course to accompany GEOG 201. Analysis of the components of the earth's energy balance using basic instrumentation; weather map interpretation; soil analysis; the application of map and air photo interpretation techniques to landform analysis.

0101	Jose Funes Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab
0201	Jose Funes Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab
0301	Jose Funes Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab
0401	Jose Funes Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab
0501	Jose Funes Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab
0601	Carrie Lewey Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab
0701	Carrie Lewey Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab
0801	Carrie Lewey Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab
0901	Dewayne Haamid Class time/details on ELMs	Seats (Total: 24) ONLINE	Lab

1001	Diego Garrison	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab

GEOG212 **Career Planning for Geographical Sciences, GIS, and ENSP Majors**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in one of the following programs (Geography; GEOG-GIS & Computer Cartography).

Increase student knowledge of professional development opportunities in Geographical Sciences through classroom activities and invited speakers, and to build awareness of career development tools and strategies.

0101	Amanda Hall	Seats (Total: 48)	
	W 3:00pm - 5:00pm	LEF 1158	Lab

GEOG301 **Advanced Geographical Environmental Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG201 and GEOG211. Credit only granted for: GEOG398B or GEOG301. Formerly: GEOG398B.

This course will provide the students with an overview of the key elements of physical geography, including biogeography (factors and processes that control the geographical distributions of plants and animals, climatology (processes associated with controlling variations in weather and climate), and geomorphology (factors and processes that control changes to the physical structure of the earth surface in relation to geological structures).

0101	Joanne Hall	Seats (Total: 50)	
	TuTh 12:30pm - 1:45pm	TWS 0320	

GEOG306 **Introduction to Quantitative Methods for the Geographic Environmental Sciences**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR

Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Essentials in the quantitative analysis of spatial and other data, with a particular emphasis on statistics and programming. Topics include data display, data description and summary, statistical inference and significance tests, analysis of variance, correlation, regression, and some advanced concepts, such as matrix methods, principal component analysis, and spatial statistics. Students will develop expertise in data analysis using advanced statistical software.

Students must pay a $40.00 lab materials fee.

0101	Naijun Zhou MW 9:00am - 9:50am W 12:00pm - 2:00pm	Seats (Total: 25) TYD 1118 LEF 1136	 Lab
0102	Naijun Zhou MW 9:00am - 9:50am W 2:00pm - 4:00pm *Restriction: Open to GEOG, GIS, & ENSP-Coastal, Land Use, Global majors only.*	Seats (Total: 25) TYD 1118 LEF 1136	 Lab

GEOG333 **The Social Geography of Metropolitan Areas in Global Perspective**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG201 and GEOG202; or permission of BSOS-Geography department. Credit only granted for: GEOG456 or GEOG333. Formerly: GEOG456.

A socio-spatial approach to human interaction within the urban environments: ways people perceive, define, behave in, and structure world cities and metropolitan areas. Cultural and social differences define spatial patterns of social activities which further define distinctions in distribution and interaction of people and their social institutions.

0101	Laixiang Sun TuTh 2:00pm - 3:15pm	Seats (Total: 100) SHM 2102

GEOG372 **Remote Sensing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Principles of remote sensing in relation to photographic, thermal infrared and radar imaging. Methods of obtaining quantitative information from remotely-sensed images. Interpretation of remotely-sensed images emphasizing the study of spatial and environmental relationships.

Students must pay a $40.00 lab materials fee.

0101	Belen Franch TuTh 9:30am - 10:45am Th 11:00am - 1:00pm	Seats (Total: 25) LEF 2166 LEF 1136	 Lab
0102	Belen Franch TuTh 9:30am - 10:45am F 11:00am - 1:00pm *Restriction: Open to GEOG, GIS, & ENSP-Coastal, Land Use, Global majors only.*	Seats (Total: 25) LEF 2166 LEF 1136	 Lab

GEOG373 **Geographic Information Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Characteristics and organization of geographic data; creation and use of digital geospatial databases; metadata; spatial data models for thematic mapping and map analysis; use of geographic information system in society, government, and business. Practical training with use of advanced software and geographic databases.

Students must pay a $40.00 lab materials fee.

0101	Naijun Zhou MW 12:00pm - 12:50pm F 9:00am - 11:00am	Seats (Total: 25) TYD 0117 LEF 1136	 Lab
0102	Naijun Zhou MW 12:00pm - 12:50pm F 1:00pm - 3:00pm *Restriction: Open to GEOG, GIS, & ENSP-Coastal, Land Use, Global majors only.*	Seats (Total: 25) TYD 0117 LEF 1136	 Lab
0103	Naijun Zhou MW 12:00pm - 12:50pm F 3:00pm - 5:00pm	Seats (Total: 25) TYD 0117 LEF 1136	 Lab

GEOG376 **Introduction to Computer Programming for GIS**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in MATH120, MATH130, or MATH140; or must have completed MATH220. And GEOG373; or permission of BSOS-Geography department.

Introduces conceptual and practical aspects of programming for geographic applications. The main focus is on developing a solid understanding of basic programming techniques irrespective of the specific programming language including variables, looping, conditional statements, nesting, math, strings, and other concepts. In addition, students will develop a proficiency in applying these basic programming principles to manipulating spatial data sources within the Geographic Information Systems (GIS).

Students must pay a $40.00 lab materials fee. Restriction: Open to GEOG, GIS, and ENSP-Coastal, Land Use, Global majors only.

0101	Dong Chen MW 12:00pm - 12:50pm F 9:00am - 11:00am	Seats (Total: 25) LEF 1158 LEF 1138	 Lab
0102	Dong Chen MW 12:00pm - 12:50pm F 3:00pm - 5:00pm	Seats (Total: 23) LEF 1158 LEF 1138	 Lab

GEOG384 **Internship in Geography I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: GEOG211, GEOG306, GEOG212, and GEOG201; and (ENGL393 or ENGL390). Restriction: Must be in Geography program.

Supervised field training to provide career experience. Introduction to professional level activities, demands, opportunities. Placement at a public agency, non-profit organization, or private firm. Participation requires application to the internship advisor in preceding semester.

0101	Allen Eney Contact instructor or department for details.	Seats (Total: 25)

GEOG384H **Internship in Geography I**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: GEOG211, GEOG306, GEOG212, and GEOG201; and (ENGL393 or ENGL390). Restriction: Must be in Geography program.

Supervised field training to provide career experience. Introduction to professional level activities, demands, opportunities. Placement at a public agency, non-profit organization, or private firm. Participation requires application to the internship advisor in preceding semester.

0101	Allen Eney	Seats (Total: 5)
	Contact instructor or department for details.	

GEOG385 **Internship in Geography II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG211, GEOG306, GEOG212, and GEOG201; and must have completed a Junior (Professional) English course. Restriction: Must be in Geography program.

Supervised field training to provide career experience. Introduction to professional-level activities, demands, opportunities. Placement at a public agency, nonprofit organization, or private firm. Participation requires application to the internship advisor in preceding semester.

0101	Allen Eney	Seats (Total: 25)
	Contact instructor or department for details.	

GEOG385H **Internship in Geography II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG211, GEOG306, GEOG212, and GEOG201; and must have completed a Junior (Professional) English course. Restriction: Must be in Geography program.

Supervised field training to provide career experience. Introduction to professional-level activities, demands, opportunities. Placement at a public agency, nonprofit organization, or private firm. Participation requires application to the internship advisor in preceding semester.

0101	Allen Eney	Seats (Total: 5)
	Contact instructor or department for details.	

GEOG396 **Honors Research**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of BSOS-Geography department; and senior standing or higher; and must be in Geography program. Formerly: GEOG397.

First course in the departmental honors sequence. Student development o a potential research topic under the guidance of a faculty advisor, culminating in a written and oral presentation of a research proposal.

0101	Allen Eney	Seats (Total: 5)
	Contact instructor or department for details.	

GEOG397 **Honors Thesis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG396. Restriction: Must be in Geography program; and senior standing or higher. Formerly: GEOG399.

Second course in the departmental honors sequence. Student research under the auspices of a faculty advisor, culminating in a research paper to be defended orally before the geography honors committee.

0101	Allen Eney	Seats (Total: 5)
	Contact instructor or department for details.	

GEOG398 **Special Topics in Geography**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introductory course dealing with special topics in geography.

Contact department for information to register for this course.

GEOG398A **Special Topics in Geography; Issues in African Development**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

An introductory course dealing with special topics in geography.

Also offered as AASP398D, GVPT359F, and SOCY398Y. Credit only granted for AASP398D, GEOG398A, GVPT359F, or SOCY398Y.

0101	Sangeetha Madhavan	Seats (Total: 20)
	W 2:00pm - 4:30pm	HBK 0108

GEOG398H **Special Topics in Geography**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

An introductory course dealing with special topics in geography.

0101	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
	Contact department or instructor for details.	

0102	George Hurtt	Seats (Total: 5)
	Contact instructor or department for details.	

GEOG413 **Migration: Latin America and the United States**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG313; or permission of BSOS-Geography department. Recommended: HIST250; or USLT201; or LASC234. Credit only granted for: GEOG413, or GEOG498M. Formerly: GEOG498M.

Develops an understanding of the push and pull factors that have contributed to human mobility (migration) that has transformed the Americas. The class is divided in two parts: immigration and emigration from Latin American and Latin America migration to the United States. We will be interested in studying the migration shifts that have occurred in Latin America and the theories that help explain them. The themes that will be addressed are the history of migration with Latin America and to North America, the impact of this migration on both sending and receiving countries, and the various policy strategies and issues concerning migration.

Additional Note: Also offered as GEOG788M. Credit granted for GEOG413, GEOG498M, or GEOG788M.

0101	Ronald Luna	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	LEF 1158

GEOG415 **Land Use, Climate Change, and Sustainability**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG123 or GEOG306; or permission of BSOS-Geography department. Recommended: GEOG340; or GEOG342; or GEOG331. Or GEOG201; and GEOG211. Credit only granted for: GEOG415 or GEOG498D. Formerly: GEOG498D.

The issues of climate change and land use change as two interlinked global and regional environmental issues and their implications for society and resource use are explored.

0101	George Hurtt	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	LEF 1158

GEOG416 **Conceptualizing and Modeling Human-Environmental Interactions**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of BSOS-Geography department. Or GEOG306, STAT100, MATH107, or MATH111; and (GEOG201 and GEOG202); and (GEOG331 or GEOG330). Corequisite: MATH130, MATH140, or MATH120; or MATH220. Credit only granted for: GEOG416 or GEOG498N. Formerly: GEOG498N.

Develops skills to carry out research that integrates environmental and economic aspects of sustainability by introducing extensively used quantitative tools for analyzing human-environmental interactions in the field of ecological economics. These include, e.g., index number calculations and decomposition analysis, Environmental Kuznets Curve (EKC), environmental input-output analysis and life-cycle analysis, and multi-criteria decisions aid (MCDA). Students will need laptops to run models during class.

Restriction: Open to GOEG, GIS, & ENSP-Coastal, Land Use, Global majors only.

0101	Kuishuang Feng	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	LEF 1158

GEOG441 **The Coastal Ocean**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG140; or students who have taken courses with comparable content may contact the department; or permission of BSOS-Geography department. Credit only granted for: GEOG441 or GEOG498C. Formerly: GEOG498C.

Introduction to coastal oceanography, focusing on the physical, biological, and geological aspects of ocean areqs on the inner continental shelves. Wave, currents, and tidal dynamics of bays, open coast, estuaries, and deltas. Sedimentary environments of major coastal types. Ecology and biogeochemical relationships, including benthic and planktonic characteristics. Coastal evolution with sea level rise. Human impacts: eutrophication, modification of sedimentation. The coastal future: rising sea level, hypoxia, and increased storminess.

0101	Seth Miller	Seats (Total: 40)
	M 4:00pm - 6:30pm	LEF 2166

GEOG472 **Remote Sensing: Digital Processing and Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG372 and GEOG306; or students who have taken courses with comparable content may contact the department. Credit only granted for: GEOG472 or GEOG480. Formerly: GEOG480.

Digital image processing and analysis applied to satellite and aircraft land remote sensing data. Consideration is given to preprocessing steps including calibration and geo registration. Analysis methods include digital image exploration, feature extraction thematic classification, change detection, and biophysical characterization. One or more application examples may be reviewed.

Students must pay a $40.00 lab materials fee. Restriction: Open to GEOG, GIS, & ENSP-Coastal, Land Use, Global majors only.

0101	Dongdong Wang	Seats (Total: 25)	
	TuTh 9:30am - 10:45am Th 11:00am - 1:00pm	LEF 1158 LEF 1138	Lab

GEOG473 **Geographic Information Systems and Spatial Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOG306 and GEOG373; or students who have taken courses with comparable content may contact the department. Credit only granted for: GEOG473 or GEOG482. Formerly: GEOG482.

Analytical uses of geographic information systems; data models for building geographic data bases; types of geographic data and spatial problems; practical experience using advanced software for thematic domains such as terrain analysis, land suitability modeling, demographic analysis, and transportation studies.

Students must pay a $40.00 lab materials fee. Restriction: Open to GEOG, GIS, & ENSP-Coastal, Land Use, Global majors only.

0101	Naijun Zhou	Seats (Total: 25)	
	MW 10:00am - 10:50am F 11:00am - 1:00pm	LEF 2166 LEF 1138	Lab
	Restriction: Open to GEOG, GIS, and ENSP-Coastal, Land Use, Global majors only.		
0102	Naijun Zhou	Seats (Total: 25)	
	MW 10:00am - 10:50am F 1:00pm - 3:00pm	LEF 2166 LEF 1138	Lab

GEOG498 **Topical Investigations**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Independent study under individual guidance.

Contact department for information to register for this course.

GEOG498I **Topical Investigations; Algorithms for Geospatial Computing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Independent study under individual guidance.

Also offered as CMSC498Q. Credit only granted for GEOG498I or CMSC498Q. Geometric primitives and algorithms for discrete and continuous spatial data processing. Point data representation and analysis: spatial data structures, neighbor finding and range queries, clustering algorithms. Terrain modeling: grids and TINs, algorithms and data structures for building and querying TINs, gridding and interpolation. Terrain analysis: segmentation through watershed computation, algorithms for visibility comp utation. Applications to LiDAR data processing and analysis for forest management, urban modeling, and coastal data mapping.

0101	Leila DeFloriani	Seats (Total: 24)
	TuTh 11:00am - 12:15pm	LEF 1171

GEOG603 **Masters Research Tutorial**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: GEOG600. Restriction: Permission of BSOS-Geography department. Credit only granted for: GEOG603 or GEOG610. Formerly: GEOG610.

Development of Masters scholarly paper topic, critical literature review, formulation of geographical approach to research methodology. Individual meetings with faculty. Comprehensive exam before the end of the semester.

Contact department for information to register for this course.

GEOG606 **Quantitative Spatial Analysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: GEOG305; or permission of BSOS-Geography department. Credit only granted for: GEOG605 or GEOG606. Formerly: GEOG605.

Multivariate statistical method applications to spatial problems. Linea and non-linear correlation and regression, factor analysis, cluster analysis. Spatial statistics including: trend surfaces, sequences, point distributions. Applications orientation.

0101	Giovanni Baiocchi	Seats (Total: 24)
	Tu 4:00pm - 6:30pm	LEF 1171

GEOG608 **Comprehensive Portfolio Assessment Summary**

Credits: 1-3 Grading Method: Sat-Fail

Evaluation of a PhD student's portfolio.

Contact department for information to register for this course.

GEOG615 **Land Cover and Land Use Change**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: GEOG442, GEOG472, GEOG435, or GEOG473; or permission of BSOS-Geography department.

This class provides an examination of land cover and land use change science, addressing the causes, impacts and projection of change. Key concepts of land use science are presented and recent research papers and case studies are reviewed. Class consists of lectures, invited presentations and individual student projects and presentations.

0101	George Hurtt	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	LEF 1158

GEOG651 **Spatial Statistics**

Credits: 3 Grading Method: Regular

Prerequisite: GEOG615; or students who have taken courses with comparable content may contact the department. Restriction: Must be in M.Prof.Studies: Geospatial Information Sciences (Master's) program; or must be in Graduate Certificate: Professional Studies-Geospatial Information Sciences.

This course is about quantitative analysis of spatial data. It is intended to provide a broad survey of various methods of exploratory statistical data analysis most useful in environmental and social sciences. The course is a mix of theory, methods, and applications geared towards helping students: (1) develop an understanding of the important theoretical concepts in spatial data analysis; and (2) gain practical experience in application of spatial statistics to a variety of social and environmental problems using advanced statistical software.

CG01	Fayuan Li	Seats (Total: 16)
	Meets March 15, 2019 - June 7, 2019	
	Th 8:30am - 12:15pm	ONLINE

GEOG653 **Spatial Analysis**

Credits: 3 Grading Method: Regular

Prerequisite: GEOG579 or GEOG506; or students who have taken courses with comparable content may contact the department. Restriction: Must be in M.Prof.Studies: Geospatial Information Sciences (Master's) program; or must be in the Geospatial Information Sciences (Graduate Certificate) program.

Methods of spatial analysis including measuring aspects of geometric features and identifying spatial patterns of geospatial objects that are represented as point, line, network, areal data, and 3-D surfaces.

Students must pay a $40.00 lab materials fee.

Contact department for information to register for this course.

GEOG654 **GIS and Spatial Modeling**

Credits: 3 Grading Method: Regular

Prerequisite: GEOG653. Restriction: Must be in M.Prof.Studies: Geospatial Information Sciences (Master's) program; or must be in Graduate Certificate: Professional Studies-Geospatial Information Sciences.

Provide foundations and understanding on various issues related to modeling and simulation in GIS context. It will addresses the concepts, tools, and techniques of GIS modeling, and presents modeling concepts and theory as well as provides opportunities for hands-on model design, construction, and application. The focus will be on raster-based modeling. This course is also application-orientated, particularly in these fields such as terrain modeling, LULC modeling, hydrological modeling, suitability modeling, etc.

Contact department for information to register for this course.

GEOG655 **Spatial Database System**

Credits: 3 Grading Method: Regular

Prerequisite: GEOG653. Restriction: Must be in M.Prof.Studies: Geospatial Information Sciences (Master's) program; or must be in Graduate Certificate: Professional Studies-Geospatial Information Sciences.

This course is designed to help students understand, analyze, design, and implement spatial databases. While the basic concepts and theories of database will be introduced, the focus of this course will be on providing students with hands-on experiences to practice the technical skills used in spatial database design and implementation. SQL, Oracle, and ArcSDE are the key topics.

Students must pay a $40.00 lab materials fee.

Contact department for information to register for this course.

GEOG657 **Web Programming**

Credits: 3 Grading Method: Regular

Prerequisite: GEOG653. Restriction: Must be in M.Prof.Studies: Geospatial Information Sciences (Master's) program; or must be in Graduate Certificate: Geospatial Information Sciences program. Credit only granted for: GEOG657 or GEOG788R. Formerly: GEOG788R.

Intermediate course designed to teach students the techniques for Web development, particularly creating dynamic and data-driven Web applications. Introduces a high-level, object-oriented programming language such as VB.Net and the designing, coding, debugging, testing, and documenting for the development of Web-based applications. Other popular Web development tools such as DHTML, CSS and PHP are also covered.

Students must pay a $40.00 lab materials fee.

Contact department for information to register for this course.

GEOG661 **Fundamentals of Geospatial Intelligence**

Credits: 3 Grading Method: Regular

Geospatial Intelligence (GEOINT) is the collection, analysis, visualization and dissemination of geospatial information to support decision-making. This course introduces the fundamental knowledge required to become a successful GEOINT practitioner, including the history of the GEOINT discipline, the intelligence applications of remote sensing and Geographic Information Systems (GIS) technologies, and how GEOINT products are used to support national security and humanitarian missions. Upon completion of this course you will understand the roles that technology, policy, doctrine, government, and industry play in shaping the Geospatial Intelligence discipline, and develop the technical knowledge and domain expertise to create basic GEOINT products that provide context for decision makers.

GI01	Micah Brachman **Meets February 25, 2019 - May 17, 2019** W 5:30pm - 8:00pm Th 5:30pm - 8:00pm	Seats (Total: 15) LEF 1201 LEF 0135	 Lab
GI02	Micah Brachman **Meets February 25, 2019 - May 17, 2019** W 5:30pm - 8:00pm Th 5:30pm - 8:00pm	Seats (Total: 15) LEF 1201 LEF 1201	 Lab

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GEOG663 **Big Data Analytics**

Credits: 3 Grading Method: Regular

Recommended: Students taking the course must be familiar with data structures, basic GIS and RS concepts, and demonstrate basic understanding of using GIS and RS software. Restriction: Permission of BSOS-Geography department; or must be enrolled in Geographical Sciences MPS or graduate certificate program.

Designed to introduce statistical analysis over big data sets (and tackling big data problems), primarily in geography and spatial sciences, but with broader appeal throughout the socio-behavioral sciences. Students will be introduced to a range of methods that can be applied to the exploration, modeling, and visualization of big quantitative data. This course explores data fusion, statistical analysis, and data-mining for geospatial and non-geospatial data in structured and unstructured form, with an emphasis on large silos of data across diverse sources and assumptions. Topics will include open sourcing, metadata schemes, data standards and models, data-access, data-mining, clustering methods, classifiers, data reduction, machine learning, filtering schemes, real-time and streaming data, archiving and preservation, and handling uncertainty.

GI01	Ruibo Han	Seats (Total: 15)	
	Meets February 25, 2019 - May 17, 2019		
	W 5:30pm - 8:00pm	LEF 1106	
	Th 5:30pm - 8:00pm	LEF 1106	Lab
GI02	Ruibo Han	Seats (Total: 15)	
	Meets February 25, 2019 - May 17, 2019		
	W 5:30pm - 8:00pm	LEF 1106	
	Th 5:30pm - 8:00pm	LEF 1106	Lab

GEOG683 **Hazards and Emergency Management**

Credits: 3 Grading Method: Regular

Timely and accurate Geospatial Intelligence (GEOINT) is essential for protecting people from hazardous events such as floods, wildfires, tsunamis, hurricanes, industrial accidents, and terrorist attacks. GEOINT plays a critical role in all four stages of emergency management: preparedness, mitigation, response, and recovery. The use of remote sensing and Geographic Information Systems (GIS) before, during, and after Hurricane Katrina and the 9/11 terror attacks are two of the case studies that are discussed during this course. You will develop a deeper understanding of the emergency management successes and failures that occurred during these historic and deadly events, and learn the technical skills to develop and disseminate GEOINT products that support decision-making at all four stages of emergency management.

Timely and accurate Geospatial Intelligence (GEOINT) is essential for protecting people from hazardous events such as floods, wildfires, tsunamis, hurricanes, industrial accidents, and terrorist attacks. GEOINT plays a critical role in all four stages of emergency management: preparedness, mitigation, response, and recovery. The use of remote sensing and Geographic Information Systems (GIS) before, during, and after Hurricane Katrina and the 9/11 terror attacks are two of the case studies that are discussed during this course. You will develop a deeper understanding of the emergency management successes and failures that occurred during these historic and deadly events, and learn the technical skills to develop and disseminate GEOINT products that support decision-making at all four stages of emergency management.

GI01	Micah Brachman	Seats (Total: 15)	
	Meets February 25, 2019 - May 17, 2019		
	M 5:30pm - 8:00pm	LEF 1106	
	Tu 5:30pm - 8:00pm	LEF 1106	Lab

GEOG697 **Capstone Project**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 24 credits in GEOG courses. Restriction: Students taking the course must be familiar with data structures, basic GIS and RS concepts, and demonstrate basic understanding of using GIS and RS software. And must be enrolled in Geographical Sciences MPS or graduate certificate program; or permission of BSOS-Geography department.

An independent research project that demonstrates competence in geospatial intelligence technologies. This project can originate from an internship, from relevant work at a current or past employer, or can be developed in conjunction with a department faculty. The student will prepare a project report and presentation which shall contain an executive summary, background information including a literature review and establishment of requirements, a detailed technical description of the project data and methods, a discussion of results obtained, and final conclusions and recommendations. The final project submission will include all data, computer code and/or workflow documentation required to replicate the project results. In completing this project, students develop a concrete example of how GEOINT technologies can be applied to solve real-world problems, and begin developing a portfolio that can be presented to potential employers.

An independent research project that demonstrates competence in geospatial intelligence technologies. This project can originate from an internship, from relevant work at a current or past employer, or can be developed in conjuction with a department faculty. The student will prepare a project report and presentation which shall contain an executive summary, background information including a literature review and establishment of requirements, a detailed techincal description of the project data and methods, a discussion of results obtained, and final conclusions and recommendations. The final project submission will include all data, computer code and/or workflow documentation required to replicate the project results. In completing this project, students develop a concrete example of how GEOINT technologies can be applied to solve real-world problems, and begin developing a portfolio that can be presented to potential employers.

GI01	Ruibo Han	Seats (Total: 15)	
	Meets February 25, 2019 - May 17, 2019		
	M 5:30pm - 9:15pm	LEF 1201	

GEOG788 **Selected Topics in Geography**

(Perm req) Credits: 1-3 Grading Method: Regular

Readings and discussion on selected topics in the field of geography.

Repeatable to 6 credits if content differs.

Contact department for information to register for this course.

GEOG788D **Selected Topics in Geography; From Communicating Science to Facilitating Learning and Didactical Skill**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Readings and discussion on selected topics in the field of geography.

0101	Tatiana Loboda	Seats (Total: 25)
	M 3:00pm - 5:30pm	LEF 1158

GEOG788I **Selected Topics in Geography; Algorithms for Geospatial Computing**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Readings and discussion on selected topics in the field of geography.

Geometric primitives and algorithms for discrete and continuous spatial data processing. Point data representation and analysis: spatial data structures, neighbor finding and range queries, clustering algorithms. Terrain modeling: grids and TINs, algorithms and data structures for building and querying TINs, gridding and interpolation. Terrain analysis: segmentation through watershed computation, algorithms for visibility comp utation. Applications to LiDAR data processing and analysis for forest management, urban modeling, and coastal data mapping.

0101	Leila DeFloriani	Seats (Total: 24)
	TuTh 11:00am - 12:15pm	LEF 1171

GEOG788M **Selected Topics in Geography; Migration: Latin America and the United States**

Credits: 3 Grading Method: Regular, Audit, Sat-Fail

Readings and discussion on selected topics in the field of geography.

0101	Ronald Luna	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	LEF 1158

GEOG789 **Independent Readings**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Independent reading as arranged between a graduate faculty member and graduate student.

Repeatable to 6 credits if content differs.

Contact department for information to register for this course.

GEOG790 **Internship in Geography**

Credits: 3

Grading Method: Regular, Audit

Field experience in the student's specialty in a Federal, state, or local agency or private business. Research paper required.

Contact department for information to register for this course.

GEOG797 **Professional Project**

Credits: 3

Grading Method: Regular

Prerequisite: GEOG795; and must have completed or be concurrently enrolled in ENCE662. Restriction: Must be in M.Prof.Studies: Geospatial Information Sciences (Master's) program.

Data and materials can originate from an internship (internal or external) or from relevant work experience with current employer. Under direction of faculty advisor, students will prepare a project report containing explanation of the requirements for the work, technical account of the activities undertaken, including literature review, description of methods and approaches taken, a critical discussion of results, along with conclusions and recommendations developed from the project. Final project will consist of a full-fledged GIS application that is up and running and can be tested, providing potential employers with a portfolio demonstrating student's ability to manage and develop a GIS application in real world situations.

Contact department for information to register for this course.

GEOG798 **Selected Topics in Geography: Seminar Series; Seminar Series**

Credits: 1

Grading Method: Regular, Audit

Readings and discussions on selected topics in the field of geography.

0101	Rachel Berndtson	Seats (Total: 48)
	Th 3:30pm - 5:00pm	LEF 1158

GEOG799 **Master's Thesis Research**

(Perm req)

Credits: 1-6

Grading Method: Regular

Contact department for information to register for this course.

GEOG898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

GEOG899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

GEOL Geology Spring 2019

GEOL100 **Physical Geology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNL (if taken with GEOL110), DSNS

Credit only granted for: GEOL100 or GEOL120. Additional information: CORE Distributive Studies Physical Science Laboratory Course only when taken concurrently with GEOL 110.

A general survey of the rocks and minerals composing the earth, its surface features and the agents that form them, and the dynamic forces of plate tectonics.

0101	Tracey Centorbi MWF 1:00pm - 1:50pm	Seats (Total: 95) SYM 0200	
0201	Nicholas Schmerr TuTh 2:00pm - 3:15pm	Seats (Total: 95) PLS 1140	

GEOL102 **Historical Geology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOL120 or GEOL100; and GEOL110. Or permission of CMNS-Geology department.

Earth's history as revealed through the principles of stratigraphy and the processes of physical geology. Emphasis on formations and geologic development of the North American continent.

0101	Thomas Holtz MWF 9:00am - 9:50am W 2:00pm - 5:00pm	Seats (Total: 24) PLS 1113 GEO 2107	 Lab

GEOL110 **Physical Geology Laboratory**

Credits: 1 | Grading Method: Regular, Pass-Fail

Prerequisite: Must have completed or be concurrently enrolled in GEOL120 or GEOL100. Additional information: CORE Distributive Studies Physical Science Laboratory Course only when taken concurrently with GEOL 100.

The basic materials and tools of physical geology stressing familiarization with rocks and minerals and the use of maps in geologic interpretations.

Students must pay a $50.00 lab materials fee.

0101	Connor Hilton, Laura Sammon, Mong-Han Huang M 3:00pm - 6:00pm	Seats (Total: 20) GEO 2106	 Lab
0201	Mong-Han Huang, Laura Sammon, Connor Hilton M 12:00pm - 3:00pm	Seats (Total: 20) GEO 2106	 Lab
0301	Goeun Ha, Mong-Han Huang, Laura Sammon Tu 9:00am - 12:00pm	Seats (Total: 20) GEO 2106	 Lab
0401	Mong-Han Huang, Laura Sammon, Goeun Ha Tu 4:00pm - 7:00pm	Seats (Total: 20) GEO 2106	 Lab
0501	William Hoover, Mong-Han Huang, Laura Sammon Th 9:00am - 12:00pm	Seats (Total: 20) GEO 2106	 Lab
0601	Laura Sammon, William Hoover, Mong-Han Huang Th 4:00pm - 7:00pm	Seats (Total: 20) GEO 2106	 Lab
0901	Mong-Han Huang, Laura Sammon W 3:00pm - 6:00pm	Seats (Total: 20) GEO 2106	 Lab

GEOL120 **Environmental Geology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNL (if taken with GEOL110), DSNS

Credit only granted for: GEOL100 or GEOL120.

A review of geologic factors underlying many environmental problems and the interactions between population and physical environment: geologic hazards, land-use planning, conservation, mineral resources, waste disposal, land reclamation, and the geologic aspects of health and disease. The course is aimed at lower division students in education and liberal arts, and should be useful to any student concerned with geologic perspectives of environmental problems.

0201	Sujay Kaushal TuTh 3:30pm - 4:45pm W 3:00pm - 3:50pm	Seats (Total: 20) CHM 1402 PLS 1172	Discussion
0202	Sujay Kaushal TuTh 3:30pm - 4:45pm W 4:00pm - 4:50pm	Seats (Total: 20) CHM 1402 PLS 1172	Discussion
0203	Sujay Kaushal TuTh 3:30pm - 4:45pm W 5:00pm - 5:50pm	Seats (Total: 20) CHM 1402 PLS 1172	Discussion
0204	Sujay Kaushal TuTh 3:30pm - 4:45pm W 3:00pm - 3:50pm	Seats (Total: 20) CHM 1402 PLS 1158	Discussion
0205	Sujay Kaushal TuTh 3:30pm - 4:45pm W 4:00pm - 4:50pm	Seats (Total: 20) CHM 1402 PLS 1158	Discussion
0206	Sujay Kaushal TuTh 3:30pm - 4:45pm W 5:00pm - 5:50pm	Seats (Total: 20) CHM 1402 PLS 1158	Discussion

GEOL123 **Causes and Consequences of Global Change**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: PS	General Education: DSNS, SCIS

Also offered as: AOSC123. Credit only granted for: AOSC123, GEOG123, GEOL123, or METO123.

Study of the major components of Earth's climate system and climate change history. Discussion of 21st century climate change prediction, mitigation and adaptation efforts.

0101	Michael Evans MW 12:00pm - 12:50pm F 9:00am - 9:50am	Seats (Total: 20) ATL 2324 PLS 1164	Discussion
0102	Michael Evans MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 20) ATL 2324 PLS 1164	Discussion
0103	Michael Evans MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 20) ATL 2324 PLS 1164	Discussion
0104	Michael Evans MW 12:00pm - 12:50pm F 9:00am - 9:50am	Seats (Total: 20) ATL 2324 PLS 1172	Discussion
0105	Michael Evans MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 20) ATL 2324 PLS 1172	Discussion
0106	Michael Evans MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 20) ATL 2324 PLS 1172	Discussion

GEOL204 **Dinosaurs, Early Humans, Ancestors, and Evolution; The Fossil Record of Vanished Worlds of the Prehistoric Past**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNS, SCIS

Examination of evidence used to reconstruct critical events in the history of life by looking at case studies of significant evolutionary origins, transitions, and extinctions; addressing the role of paleontology in human society, including science education, conservation, and the media.

0101	Thomas Holtz TuTh 9:30am - 10:45am M 3:00pm - 3:50pm	Seats (Total: 20) SHM 2102 PLS 1158	Discussion
0102	Thomas Holtz TuTh 9:30am - 10:45am M 4:00pm - 4:50pm	Seats (Total: 20) SHM 2102 PLS 1158	Discussion

0103	Thomas Holtz TuTh 9:30am - 10:45am M 5:00pm - 5:50pm	Seats (Total: 20) SHM 2102 PLS 1158	Discussion
0104	Thomas Holtz TuTh 9:30am - 10:45am M 3:00pm - 3:50pm	Seats (Total: 20) SHM 2102 PLS 1168	Discussion
0105	Thomas Holtz TuTh 9:30am - 10:45am M 4:00pm - 4:50pm	Seats (Total: 20) SHM 2102 PLS 1168	Discussion
0106	Thomas Holtz TuTh 9:30am - 10:45am M 5:00pm - 5:50pm	Seats (Total: 20) SHM 2102 PLS 1168	Discussion

GEOL322 **Mineralogy**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOL120 or GEOL100; and GEOL110. And CHEM131 and CHEM132; or (CHEM135 and CHEM136); or CHEM103. Restriction: Permission of instructor is required for non-degree seeking students.

Basic mineralogy for geology majors. The principles of morphologic crystallography, crystal chemistry, and determinative mineralogy.

0101	Tracey Centorbi TuTh 11:00am - 12:15pm M 1:00pm - 3:50pm	Seats (Total: 22) PLS 1111 GEO 2107	Lab

GEOL340 **Geomorphology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOL120 or GEOL100. Restriction: Permission of instructor is required of non-degree seeking students.

Analysis of landforms, organized on the basis of the geologic processes that have operated during the late Cenozoic. Constructional and erosional landforms related to physical systems operating on geologic structures through time.

0101	Karen Prestegaard TuTh 9:30am - 10:45am W 10:00am - 1:00pm	Seats (Total: 24) PLS 1117 GEO 2107	 Lab

GEOL341 **Structural Geology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOL120 or GEOL100; and GEOL102; and GEOL110. Or permission of CMNS-Geology department. Restriction: Permission of instructor is required of non-degree seeking students.

Study of the deformation of Earth's lithosphere, especially stress, rheology, strain, and the origin and significance of structural features. Development of 3-dimensional thinking through drafting and drawing of structures, construction of geologic maps and cross-sections, and stereographic and orthographic representation of structures. Improvement of scientific writing. Two weekend field trips.

0101	Mong-Han Huang MWF 9:00am - 9:50am M 10:00am - 1:00pm	Seats (Total: 20) PLS 1158 GEO 2107	 Lab

GEOL388I **Field Studies II; The Geology, Ecology, and Sustainable Technologies of the Island of Hawaii**

(Perm req)

Credits: 3 Grading Method: Regular

Examination and investigation of Earth Science phenomena in the field, particularly geology. Involves field work of one week or a longer duration, which would normally involve both observations and data collection, with associated classroom lectures and/or laboratory study, normally including additional analysis of collected observations and data. Particular programs may require certain prerequisites. Permission of instructor required. Special fees may be necessary.

Enrollment is by permission only. (DSSP) Credit awarded only for one of GEOL388I and CPSP359I. A special program fee is required. A spring break tour of the big island of Hawaii highlights the island's physical and biological environment, and human society's interactions with it. Pre-departure lectures and exam, and a research project are required.

0101	Beth Parent, John Merck, Lauren Gilmartin, Jessica Wilke Contact instructor or department for details.	Seats (Total: 18)

GEOL393 **Geology Senior Thesis I: Proposal**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: PHYS141 and MATH141. And CHEM131 and CHEM132; or (CHEM135 and CHEM136). And must have completed at least two upper-level geology courses and be concurrently enrolled in a third. Restriction: Junior standing or higher; and must be in Geology program; and non-degree-seeking students require the permission of the instructor.

The first semester of the two-semester Geology Senior Thesis. Emphasis is on developing a plan for original research in the geosciences and presenting that plan both in writing and in public presentations that adhere to geosciences professional standards.

0101	Philip Piccoli	Seats (Total: 10)
	Tu 4:30pm - 6:30pm	PLS 1158
	Contact instructor or department for details.	

GEOL394 Geology Senior Thesis II: Research

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

Prerequisite: GEOL393; and must have completed at least three upper level GEOL courses. Restriction: Must be in Geology program; and junior standing or higher; and in addition, non-degree-seeking students require the permission of the department.

The second semester of the two-semester Geology Senior Thesis. Investigation of specific original research question in geosciences. Emphasis is on completion of original research proposed in GEOL393 and presentation of results both in writing and in public presentations that adhere to geosciences professional standards.

Contact department for information to register for this course.

GEOL431 Vertebrate Paleobiology

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI207, BSCI392, GEOL104, GEOL204, or GEOL331; or permission of CMNS-Geology department.

A survey of the evolution of the vertebrates, encompassing information from the diversity of living members, but concentrating on the contribution of the fossil record. Emphasis is on the phylogenetic systematics, comparative and functional anatomy, developmental biology, and stratigraphic distribution of major extinct and extant groups.

0101	John Merck, Thomas Holtz	Seats (Total: 20)	
	TuTh 12:30pm - 1:45pm	PLS 1115	
	M 1:00pm - 1:50pm	PLS 1115	Discussion

GEOL435 Environmental Geochemistry

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH115; and (GEOL100 or GEOL120); and (GEOL436 or GEOL444). And CHEM131 and CHEM132; or (CHEM135 and CHEM136). Restriction: Nondegree-seeking students require the permission of the instructor. Credit only granted for: GEOL489W or GEOL435. Formerly: GEOL489W.

An understanding of geochemical cycles of Earth's surface systems including soils, rivers, lakes, and estuaries and causes and implications of alteration of geochemical cycles. Topics include chemical weathering, soils, chemical composition of inland waters, hydrologic tracers, salinization, eutrophication, nutrient and metal pollution, and global geochemical cycles.

0101	Sujay Kaushal	Seats (Total: 10)	
	Tu 12:30pm - 3:15pm	HBK 0108	

GEOL443 **Petrology**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOL322. And CHEM131 and CHEM132; or (CHEM135 and CHEM136); or CHEM103. And must have completed or be concurrently enrolled in GEOL423; and (GEOL100 or GEOL120); and GEOL110. Corequisite: Permission of CMNS-Geology department. Restriction: Non-degree-seeking students require the permission of the instructor.

Study of igneous and metamorphic rocks: petrogenesis, distributions, chemical and mineralogical relations, macroscopic and microscopic descriptions, geologic significance.

0101	Richard Walker, Sarah Penniston-Dorland	Seats (Total: 18)	
	TuTh 8:00am - 9:15am	PLS 1113	
	Th 1:00pm - 4:00pm	GEO 2117	Lab

GEOL457 **Seismology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOL120 or GEOL100; and (MATH141, GEOL110, and MATH140). Or permission of CMNS-Geology department. Recommended: PHYS171, PHYS141, or PHYS161. Restriction: Non-degree-seeking students require the permission of the instructor. Credit only granted for: GEOL457 or GEOL489A. Formerly: GEOL489A.

General overview of the basics of seismology, starting with wave propagation, seismic reflection and refraction. Applications to the determination of the seismic velocity and anisotropy structure of the Earth. Earthquake generation, postseismic deformation and creep events, relation to faulting and plate tectonics.

0101	Nicholas Schmerr	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	PLS 1172

GEOL488 **Geology Colloquium**

Credits: 1 Grading Method: Sat-Fail

Contemporary research topics and issues in geosciences are explored through the weekly Geology departmental colloquium and discussion of its contents.

0101	Mong-Han Huang	Seats (Total: 30)
	F 3:00pm - 4:30pm	Location: TBA

GEOL497 **Recent Advances: Geology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed at least 2 upper-level GEOL courses. Corequisite: GEOL393; and a third upper-level geology course. Restriction: Must be in Geology program; and GPA of 3.0 or better in both overall and in all courses required for the major; and senior standing; and to be taken as late as possible in the program. Credit only granted for: GEOL497 or GEOL489H. Formerly: GEOL489H.

A survey of important recent advances in geological sciences in the context of the methods and practices of scientific research.

0101	Alan Kaufman	Seats (Total: 10)	
	W 8:00am - 8:50am	PLS 1164	
	F 3:00pm - 4:00pm	Location: TBA	
	M 4:00pm - 6:00pm	PLS 1164	Discussion

GEOL497H **Recent Advances: Geology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed at least 2 upper-level GEOL courses. Corequisite: GEOL393; and a third upper-level geology course. Restriction: Must be in Geology program; and GPA of 3.0 or better in both overall and in all courses required for the major; and senior standing; and to be taken as late as possible in the program. Credit only granted for: GEOL497 or GEOL489H. Formerly: GEOL489H.

A survey of important recent advances in geological sciences in the context of the methods and practices of scientific research.

0101	Alan Kaufman	Seats (Total: 10)	
	W 8:00am - 8:50am F 3:00pm - 4:00pm M 2:00pm - 4:00pm	PLS 1164 Location: TBA PLS 1117	Discussion

GEOL499 **Special Problems in Geology**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Intensive study of a special geologic subject or technique selected after consultation with instructor. Intended to provide training or instruction not available in other courses which will aid the student's development in his or her field of major interest.

Prerequisites: GEOL100 or GEO120, GEOL110, GEOL102; or equivalent; and permission of department. In addition, non-degree-seeking students require the permission of the instructor. Intensive study of a special geologic subject or technique selected after consultation with instructor. Intended to provide training or instruction not available in other courses which will aid the student's development in his or her field of major interest.

Contact department for information to register for this course.

GEOL635 **Environmental Geochemistry**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH115; and (GEOL100 or GEOL120); and (GEOL436 or GEOL444). And CHEM131 and CHEM132; or (CHEM135 and CHEM136). Restriction: Nondegree-seeking students require the permission of the instructor. Also offered as: GEOL435. Credit only granted for: GEOL635, GEOL789W, GEOL435 or GEOL489W. Formerly: GEOL789W.

Geochemical cycles of Earth's surface systems including soils, rivers, lakes, and estuaries and causes; and implications of their alteration. Topics include chemical weathering, soils, chemistry of inland waters, hydrologic tracers, salinization, eutrophication, nutrient and metal pollution, and global geochemical cycles.

0101	Sujay Kaushal	Seats (Total: 10)
	Tu 12:30pm - 3:15pm	HBK 0108

GEOL654 **Fluvial Geomorphology Seminar**

Credits: 3

Grading Method: Regular, Audit

Recommended: GEOL452 and GEOL340. Restriction: Non-degree-seeking students require the permission of the instructor. Credit only granted for: GEOL654 or GEOL789B. Formerly: GEOL789B.

Fluvial geomorphology is the study of the movement of water and sedimentin stream channels. This includes: formation of channels, open channel hydraulics, sediment transport or bedload and suspended load, river morphology and landscape evolution. The course is designed for graduate students and advanced undergraduates.

0101	Karen Prestegaard	Seats (Total: 12)
	Th 4:00pm - 6:30pm	PLS 1162

GEOL657 Seismic Wave Propagation

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH140 and MATH141; and (PHYS141, PHYS161, or PHYS171); and permission of CMNS-Geology department. Recommended: GEOL100 or GEOL120; and (MATH241 and MATH246); and (PHYS260 or PHYS273). Restriction: Non-degree-seeking students require the permission of the instructor. Credit only granted for: GEOL657 or GEOL789A. Formerly: GEOL789A.

A description of the physics of seismic wave propagation and their applications to the determination of the structure of the Earth and the mechanics of earthquakes.

0101	Nicholas Schmerr	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	PLS 1172

GEOL688 Geology Colloquium

Credits: 1 Grading Method: Sat-Fail

Contemporary research topics and issues in geosciences are explored through the weekly Geology departmental colloquium and discussion of its contents.

0101	Mong-Han Huang	Seats (Total: 30)
	F 3:00pm - 4:30pm	Location: TBA

GEOL789B Recent Advances in Geology; Planetary Habitability and Surface Chemistry

Credits: 3 Grading Method: Regular, Audit

Recent advances in geology research.

An introduction to the fundamental principles of astrochemistry and astrobiology, followed by a survey of the geological history, surface habitability and biosignature preservation potential of bodies within our solar system and a survey of exoplanets.

0101	Ricardo Arevalo TuTh 9:30am - 10:45am	Seats (Total: 10) PLS 1168

GEOL798 **Seminar in Geology**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Discussion of special topics in current literature in all phases of geology.

Contact department for information to register for this course.

GEOL799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

GEOL898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

GEOL899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

GERM Germanic Studies Spring 2019

GERM103 **Intensive Elementary German**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not have completed GERM102; and must not be a fluent/native speaker of German. Credit only granted for: GERM102 or GERM103.

Covers speaking, reading, writing, listening, and culture of German-speaking world.

0101	James Porter MWF 10:00am - 10:50am Class time/details on ELMs *Class time/details on ELMS.*	Seats (Total: 25) JMZ 1120 ONLINE

0201	James Porter MWF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 25) JMZ 1124 ONLINE

GERM149Z **Germanic Languages - Elementary II; Elementary Yiddish II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Continuation of GERM148. May be repeated in a different language. Subtitle will reflect the language.

Also offered as JWST282. Credit granted for GERM149Z or JWST282. Prerequisite: JWST281; or permission of ARHU-Meyerhoff Program & Center for Jewish Studies.

0101	Adi Mahalel TuTh 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 20) JMZ 1205 ONLINE

GERM203 **Intensive Intermediate German**

Credits: 4 Grading Method: Regular, Audit CORE: HO

Prerequisite: GERM103; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not have completed GERM201; and must not have completed GERM202; and must not be a fluent/native speaker of German. Credit only granted for: GERM202 or GERM203.

Covers speaking, reading, writing, listening, and culture of German-speaking world.

0101	Matthew Kelly MWF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) JMZ 2117 ONLINE
0201	Marion Lindstrom MWF 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 25) JMZ 2117 ONLINE

GERM204 **German Grammar Review**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: GERM203; or Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a fluent/native speaker of German.

An in-depth study and analysis of selected grammatical topics in a contextualized framework.

0101	Regina Ianozi	Seats (Total: 25)
	MWF 11:00am - 11:50am	JMZ 2122

GERM255 **Once Upon a Time: Fairy Tales of the Brothers Grimm**

Credits: 3 Grading Method: Regular General Education: DSHU

Credit only granted for: GERM255 or GERM289G. Formerly: GERM289G. Additional information: Course is taught in English.

A critical examination of how fairy tales and folklore pervade and influence diverse facets of Western culture, ranging from issues of politics and national identity, ethics and morality, violence and fear, education and pedagogy, to gender and sexuality in the establishment and regulation of social norms. Taking the German tales collected by Jacob and Wilhelm Grimm as its focal point, the magical and often terrifying world of fairy tales within the German, European, and American cultural traditions from Romanticism to today will be explored.

0101	Julie Koser	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	JMZ 2206

GERM301 **Conversation and Composition I: The German-Speaking World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GERM204; or students who have taken courses with comparable content may contact the department.

Practice in contemporary spoken and written German. Systematic review of grammar, and exercises in composition. Emphasis on cultural contrasts in the German-speaking world.

0101	Martina Domnick	Seats (Total: 20)
	MWF 12:00pm - 12:50pm	JMZ 2122

GERM302 **Conversation and Composition II: Current Topics in German-Speaking Society**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GERM301; or students who have taken courses with comparable content may contact the department.

Further practice in contemporary spoken and written German. Contemporary social, political, and cultural themes.

0101	Edward Dawson	Seats (Total: 20)
	MWF 11:00am - 11:50am	JMZ 1120

GERM319B **Selected Topics in Germanic Language Studies; Special Topics in Germanic Language Studies; German For Business**

Credits: 3 Grading Method: Regular

The analysis of the German language as a reflection of cultural, functional, and social practice in the German-speaking world.

0101	Regina Ianozi	Seats (Total: 20)
	MW 2:00pm - 3:15pm	JMZ 3205

GERM319G **Selected Topics in Germanic Language Studies; Seminar in German Language**

Credits: 3 Grading Method: Regular

The analysis of the German language as a reflection of cultural, functional, and social practice in the German-speaking world.

Contact department for information to register for this course.

GERM320 **Survey of German Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GERM301; or students who have taken courses with comparable content may contact the department.

Approaches to analysis of German cultural products such as literature, film, poetry, architecture and works of art. Taught in German.

0101	Peter Beicken	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	JMZ 3203

GERM320H **Survey of German Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GERM301; or students who have taken courses with comparable content may contact the department.

Approaches to analysis of German cultural products such as literature, film, poetry, architecture and works of art. Taught in German.

0101	Peter Beicken	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	JMZ 3203

GERM369A **Special Topics in Study Abroad III; Advanced German I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GERM369B **Special Topics in Study Abroad III; Advanced German II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GERM369C **Special Topics in Study Abroad III; German Composition I**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GERM369D **Special Topics in Study Abroad III; German Composition II**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GERM369L **Special Topics in Study Abroad III; Contemporary German Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GERM369P **Special Topics in Study Abroad III; Pop Culture: European-American Trends**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GERM386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

GERM389F **Topics in Germanic Culture; Berlin: History, Memory, Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics in the cultures of the German, Germanic, Indo-European peoples and of their culturally related non-Indo-European neighbors. Taught in English.

Contact department for information to register for this course.

GERM397H **Honors Reading (Independent Study)**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Supervised reading to be taken normally only by students admitted into honors program.

Contact department for information to register for this course.

GERM399F **Selected Topics in Germanic Studies; The Human Condition and the Totalitarian Experience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

GERM403 **Advanced Composition**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GERM302; or students who have taken courses with comparable content may contact the department.

Advanced instruction in and acquisition of German writing skills.

0101	Julie Koser	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	JMZ 3203

GERM403H **Advanced Composition**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GERM302; or students who have taken courses with comparable content may contact the department.

Advanced instruction in and acquisition of German writing skills.

0101	Julie Koser	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	JMZ 3203

GERM411 **German for International Business I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced skills in German for international business, including understanding and writing correspondence, reports, graphics, ads, etc., according to current German commercial style.

Contact department for information to register for this course.

GERM458A **Literary or Media Genres; Singing in German: Transmission of Sound, Transmission of Culture**

Credits: 3 Grading Method: Regular, Audit

Literary or Media Genres studies the formal and stylistic dimensions of specific genres, emphasizing genre as a social, political, and aesthetic category. Topics include pop literature; the history of German drama; and German film genres among others.

Also offered as GERM689A. Credit granted for GERM458A or GERM689A. This course explores German songs and their cultural and technological contexts from medieval minnesang to hip hop, focusing especially on the music of the last 100 years. Taught in German.

0101	Edward Dawson	Seats (Total: 20)
	M 4:30pm - 7:00pm	JMZ 3203

GERM488B **Capstone Seminar; German-Jewish Authors/Works: Kafka, Seghers, Benjamin, Celan**

Credits: 3 Grading Method: Regular, Audit

Provides an opportunity for German majors (usually in their senior year) to demonstrate that they have achieved the goals for learning established and approved by the department. Students analyze in depth a research topic and apply their accumulated learning. Requirements include engaging in an in-depth research project (research paper or media project) and an in-class presentation of their research to faculty and student peers. Taught in German.

0101	Peter Beicken	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	JMZ 3203

GERM498 **Honors Thesis Writing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Required for students pursuing departmental honors in Germanic language and literatures. Under the direction of a German department faculty member, students write their honors theses.

Contact department for information to register for this course.

GERM499 **Directed Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

GERM689A **Special Topics - M.A. Level; Singing in German: Transmission of Sound, Transmission of Culture**

Credits: 3 Grading Method: Regular, Audit

M.A.-level study of a literary, linguistic or cultural topic in German or Germanic studies.

Also offered as GERM458A. Credit granted for GERM458A or GERM689A. This course explores German songs and their cultural and technological contexts from medieval minnesang to hip hop, focusing especially on the music of the last 100 years. Taught in German.

0101	Edward Dawson	Seats (Total: 20)
	M 4:30pm - 7:00pm	JMZ 3203

GERM689Z **Special Topics - M.A. Level; Nuclear Futures: Theorizing Environmental Humanities for thePost-Fukushima Age**

Credits: 3 Grading Method: Regular, Audit

M.A.-level study of a literary, linguistic or cultural topic in German or Germanic studies.

Also offered as CMLT679Z, SLLC698Z and FREN699Z. Credit granted for GERM689Z, CMLT679Z, SLLC698Z or FREN699Z. This seminar interrogates the concept of futurity in the context of environmental activism and artistic engagement with atomic issues from 1945 to the present, focusing on Germany and Japan. We will engage with theoretical developments in the environmental humanities, including readings on the Anthropocene, precarity, and neoliberal capitalism. The course draws on a wide range of written materials and media, including personaltestimonies, poetry, fiction, film, manga, music, performance and documentation of protests. Taught in English.

0101	Hester Baer, Michele Mason	Seats (Total: 20)
	W 4:30pm - 7:00pm	JMZ 3203

GERM798 **Master's Independent Study**

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

GERM799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

GERM888 **Doctoral Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

GERM898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

GERM899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

GREK Greek Spring 2019

GREK102 **Elementary Ancient Greek II**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GREK101; or students who have taken courses with comparable content may contact the department.

Continuing development of basic grammar and reading skills; study and discussion of central aspects of Greek culture.

0101	Gregory Bucher	Seats (Total: 15)	
	MWF 12:00pm - 12:50pm	LEF 1222	
	M 1:00pm - 1:50pm	LEF 1222	Discussion

GREK112 **Elementary Modern Greek II**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GREK111; or permission of instructor. Credit only granted for: FOLA109G or GREK112. Formerly: FOLA109G.

It is designed for students who have already completed the first semester course (GREK111) and/or those whose level of proficiency in Greek is not advanced enough for the intermediate level. Like GREK111, an introduction is provided to the language and culture of modern Greece. Students acquire the basic tools of the language and learn to communicate in simple, everyday situations. This is the second of our two-semester sequence in Elementary Modern Greek and contributes to the fulfillment of the Global Engagement requirement of the College of Arts and Humanities.

0101	Polyvia Parara	Seats (Total: 10)
	MWF 12:00pm - 12:50pm	WDS 1131

GREK212 **Intermediate Modern Greek II**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GREK211; or permission of instructor. Credit only granted for: FOLA119G or GREK212. Formerly: FOLA119G.

A continuation in the development of fluency in spoken and written communication along with the exploration of syntactic and grammatical structures. Comprehension and vocabulary enrichment are further developed through selected readings from Modern Greek prose and poetry. This is the second of our two-semester sequence in Intermediate Modern Greek and contributes to the fulfillment of the Global Engagement requirement of the College of Arts and Humanities.

0101	Polyvia Parara	Seats (Total: 10)
	MWF 11:00am - 11:50am	MMH 1218

GREK301 **Scenes from Athenian Life**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Credit only granted for: GREK301 or GREK351. Formerly: GREK351.

Makes the transition from study of Greek grammar to reading. Focus on selected aspects of life in Athens: marriage, friendship, the courts, festival, theatre. Reading short works by three authors: Lysias, Plato, and a playwright (e.g., Menander). Readings are in ancient Greek.

0101	Lillian Doherty MW 3:30pm - 4:45pm	Seats (Total: 5) MMH 1218

GREK399A **Topics in Advanced Modern Greek Language and Culture; Advanced Modern Greek II**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Development of communicative skills in advanced Modern Greek. Topics will be drawn from the social and folk life of modern Greece.

0101	Polyvia Parara MWF 10:00am - 10:50am	Seats (Total: 7) MMH 1218

GREK415 **Homer**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARHU-Classics department.

Extensive readings in Greek from the Iliad or the Odyssey, with special attention to the features of Homeric style and the relationship between the two epics.

0101	Lillian Doherty Tu 5:00pm - 7:40pm	Seats (Total: 5) MMH 1218

GREK499 **Independent Study in Greek Language and Literature**

(Perm req)

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

GREK604 **Homer**

Credits: 3 Grading Method: Regular, Audit

The extensive and intensive reading of Homer, with concentration on one of his two epics. Discussion of the language, artistic qualities, and thought of the poems, and of modern views concerning their orgin and literary qualities.

0101	Lillian Doherty Tu 5:00pm - 7:40pm	Seats (Total: 10) MMH 1218	

GREK699 **Independent Study in Greek Literature**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

GREK799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

GVPT Government and Politics Spring 2019

GVPT158A **Special Topics in Study Abroad I; The European Union**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GVPT170 **American Government**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

A comprehensive study of national government in the United States.

0101	Irwin Morris MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 25) TYD 0130 TYD 1114	Discussion
0102	Irwin Morris MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) TYD 0130 TYD 1108	Discussion

0103	Irwin Morris MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 25) TYD 0130 JMZ 1120	Discussion
0104	Irwin Morris MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 25) TYD 0130 KEY 0123	Discussion
0105	Irwin Morris MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) TYD 0130 KEY 0103	Discussion
0106	Irwin Morris MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 25) TYD 0130 TYD 2109	Discussion
0107	Irwin Morris MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) TYD 0130 ARC 1105	Discussion
0108	Irwin Morris MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 25) TYD 0130 TYD 1132	Discussion
0109	Irwin Morris MW 10:00am - 10:50am F 2:00pm - 2:50pm	Seats (Total: 25) TYD 0130 TYD 1132	Discussion

GVPT200 **International Political Relations**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS, DVUP

A study of the major factors underlying international relations, the causes of conflict and cooperation among international actors, the role of international institutions, the interactions of domestic and foreign policies, and major issues in security, economy and the environment.

0101	Calvert Jones MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 25) ARC 0204 TYD 1118	Discussion

0102	Calvert Jones MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) ARC 0204 TYD 2106	Discussion
0103	Calvert Jones MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 25) ARC 0204 TYD 1102	Discussion
0104	Calvert Jones MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 25) ARC 0204 KNI 1103	Discussion
0105	Calvert Jones MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) ARC 0204 KNI 1103	Discussion
0106	Calvert Jones MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 25) ARC 0204 HBK 0125	Discussion
0107	Calvert Jones MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 25) ARC 0204 KEY 0121	Discussion
0108	Calvert Jones MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 25) ARC 0204 TYD 0111	Discussion
0109	Calvert Jones MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 25) ARC 0204 KEY 1117	Discussion

GVPT201 **Scope and Methods for Political Science Research**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Credit only granted for: GVPT100 or GVPT201. Formerly: GVPT100.

An introduction to empirical research in political science.

0101	Sarah Croco MW 1:00pm - 1:50pm F 9:00am - 9:50am	Seats (Total: 25) LEF 2166 TYD 0102	Discussion
0102	Sarah Croco MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 25) LEF 2166 TYD 1101	Discussion
0103	Sarah Croco MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 25) LEF 2166 TYD 0102	Discussion
0201	Sarah Croco MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 25) LEF 2205 TYD 0111	Discussion
0202	Sarah Croco MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) LEF 2205 TYD 0111	Discussion
0203	Sarah Croco MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) LEF 2205 TYD 1101	Discussion
0204	Sarah Croco MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) LEF 2205 ARC 1103	Discussion
0205	Sarah Croco MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) LEF 2205 TYD 1108	Discussion
0206	Sarah Croco MW 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 25) LEF 2205 TYD 0101	Discussion

GVPT202 **Politics, Constitutional Policy, and the Institution of the U.S. Supreme Court**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

A thorough examination of the U.S. Supreme Court in the American political system. Focusing on the Court as an institution-the set of norms, rules, and policymaking processes that lead to the Supreme Court's decisions-and how justices' decision-making processes critically determine substantive legal policy and the meaning of the U.S. Constitution.

0101	Patrick Wohlfarth MW 1:00pm - 1:50pm F 9:00am - 9:50am	Seats (Total: 20) SHM 2102 TWS 1313	Discussion
0102	Patrick Wohlfarth MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 20) SHM 2102 TWS 1313	Discussion
0103	Patrick Wohlfarth MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 20) SHM 2102 LEF 1171	Discussion
0104	Patrick Wohlfarth MW 1:00pm - 1:50pm F 9:00am - 9:50am	Seats (Total: 20) SHM 2102 HBK 1108	Discussion
0105	Patrick Wohlfarth MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 20) SHM 2102 HBK 1108	Discussion
0106	Patrick Wohlfarth MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 20) SHM 2102 HBK 0108	Discussion

GVPT203 **The Challenge of Authoritarianism**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

An introduction to the persistent challenge of authoritarianism. The course explores the nature of authoritarianism and its evolution from ancient through modern times. Students will study how authoritarian regimes vary, why citizens sometimes comply with them, and when and how citizens rebel. The course concludes with a review of contemporary authoritarianism, focusing on its resilience in the Middle East and East Asia and its potential for a resurgence in the US and Europe.

0101	Calvert Jones MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 20) JMZ 0220 LEF 1221	Discussion

0102	Calvert Jones MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 20) JMZ 0220 LEF 1221	Discussion
0103	Calvert Jones MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 20) JMZ 0220 LEF 1221	Discussion
0104	Calvert Jones MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 20) JMZ 0220 LEF 1222	Discussion
0105	Calvert Jones MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 20) JMZ 0220 LEF 1222	Discussion
0106	Calvert Jones MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 20) JMZ 0220 LEF 1222	Discussion

GVPT221 **Introduction to Formal Theories of Political Behavior and Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT170.

An introduction to the theories of rational choice including theories of negotiation and bargaining, elections and voting in democracies, community organizing and the contrast between the roles and performances of government and market.

0101	Piotr Swistak W 2:00pm - 4:45pm	Seats (Total: 30) TYD 0117

GVPT241 **The Study of Political Philosophy: Ancient and Modern**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Examines some of the salient continuities and breaks between the ancient and modern traditions in Western political philosophy.

0101	James Glass MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 25) TYD 0130 HBK 0103	Discussion
0102	James Glass MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 25) TYD 0130 TYD 1101	Discussion
0103	James Glass MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) TYD 0130 HBK 0103	Discussion
0104	James Glass MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 25) TYD 0130 TYD 1101	Discussion
0105	James Glass MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 25) TYD 0130 TYD 1108	Discussion
0106	James Glass MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 25) TYD 0130 TYD 1132	Discussion
0107	James Glass MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 25) TYD 0130 TYD 0102	Discussion
0108	James Glass MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 25) TYD 0130 TYD 1108	Discussion

GVPT258B **Introduction to Political Science Topics in Study Abroad; Enemy Within: Spies and Espionage in the Cold War**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258C **Introduction to Political Science Topics in Study Abroad; Government and Politics in China**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258D **Introduction to Political Science Topics in Study Abroad; Danish Politics and Society**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258J **Introduction to Political Science Topics in Study Abroad; Comparative Foreign Policy-Haifa**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258N **Introduction to Political Science Topics in Study Abroad; Arms Control in the Nuclear Realm**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258P **Introduction to Political Science Topics in Study Abroad; Sustainable Development: Environmental, Political and Social Issues**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258Q **Introduction to Political Science Topics in Study Abroad; Latin American Social Revolutions**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258R **Introduction to Political Science Topics in Study Abroad; Peace and Conflict Honors Seminar II: Regional Conflicts**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT273 **Introduction to Environmental Politics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

An overview of modern environmental philosophy, politics, and policy, exploring environmental politics in the US by way of comparison with other developed and developing countries.

0101	Jennifer Wallace TuTh 12:30pm - 1:20pm F 9:00am - 9:50am	Seats (Total: 25) TYD 2109 TYD 1102	Discussion
0102	Jennifer Wallace TuTh 12:30pm - 1:20pm F 10:00am - 10:50am	Seats (Total: 25) TYD 2109 TYD 1114	Discussion
0103	Jennifer Wallace TuTh 12:30pm - 1:20pm Th 2:00pm - 2:50pm	Seats (Total: 25) TYD 2109 HBK 0125	Discussion

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GVPT282 **Politics and the Developing World**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP

A study of the domestic governmental institutions; processes and problems such as conflict and economic development; and the socio-economic environments that are common to developing countries of Africa, the Middle East, Asia, and Latin America.

0101	Jennifer Wallace MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 25) SHM 2102 TYD 0102	Discussion
0102	Jennifer Wallace MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 25) SHM 2102 TYD 2108	Discussion

0103	Jennifer Wallace MW 10:00am - 10:50am F 2:00pm - 2:50pm	Seats (Total: 25) SHM 2102 JMZ 1122	Discussion
0104	Jennifer Wallace MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) SHM 2102 KEY 1117	Discussion
0105	Jennifer Wallace MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 25) SHM 2102 KEY 1117	Discussion
0106	Jennifer Wallace MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 25) SHM 2102 TYD 0101	Discussion

GVPT289B **Special Topics in Government and Politics; Globalization**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Substantive issues of and theoretical approaches to political phenomenon. Topics and credit vary.

Contact department for information to register for this course.

GVPT289E **Special Topics in Government and Politics; Economy and Society**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Substantive issues of and theoretical approaches to political phenomenon. Topics and credit vary.

Contact department for information to register for this course.

GVPT289G **Special Topics in Government and Politics; Global Perspectives on Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Substantive issues of and theoretical approaches to political phenomenon. Topics and credit vary.

Contact department for information to register for this course.

GVPT289P **Special Topics in Government and Politics; Citizenship and Ethics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Substantive issues of and theoretical approaches to political phenomenon. Topics and credit vary.

Contact department for information to register for this course.

GVPT289T **Special Topics in Government and Politics; Issues and Controversies in 21st Century**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Substantive issues of and theoretical approaches to political phenomenon. Topics and credit vary.

Contact department for information to register for this course.

GVPT289X **Special Topics in Government and Politics; Introduction to the European Union**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Substantive issues of and theoretical approaches to political phenomenon. Topics and credit vary.

Contact department for information to register for this course.

GVPT289Y **Special Topics in Government and Politics; Theories of Peace and Conflict**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Substantive issues of and theoretical approaches to political phenomenon. Topics and credit vary.

Contact department for information to register for this course.

GVPT301 **Identity and Conflict**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

An examination of identity as a source of civil conflict. The course explores how identity is embedded in context, how identity is manipulated for political ends, and how identity conflict may be resolved.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Johanna Birnir	Seats (Total: 30)
	M 2:00pm - 4:45pm	TYD 1101

GVPT306 **Global Environmental Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT200.

Focus on three processes of international environmental policy development- identifying problems, negotiating solutions, and implementing agreements- through a range of case studies, including global climate change.

Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program.

0101	Jennifer Hadden	Seats (Total: 30)
	MW 11:00am - 12:15pm	TYD 1132

GVPT309H **Topics in International Relations; British Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in international relations.

Contact department for information to register for this course.

GVPT309I **Topics in International Relations; Socio-Economic, Political, Religious, and Ethnic Conflicts in Israel, and the Search for Common Ground**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in international relations.

Contact department for information to register for this course.

GVPT317 **Mock Trial II: Advanced Trial Advocacy**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT217. Credit only granted for: GVPT317 or GVPT319B. Formerly: GVPT319B.

Development of trial advocacy skills through participation in practice trials and intercollegiate mock trial competitions. Student may have an opportunity to represent the university in intercollegiate mock trial tournaments, including the National Mock Trial Championships.

0101	William Mundy	Seats (Total: 40)
	W 6:30pm - 9:15pm	TYD 2108

GVPT319E **Topics in Social Advocacy; Careers in International Relations**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Reading, research and discussion of variety of topics related to social advocacy.

An overview of careers in International Relations. We will discuss common roles and career tracks in bilateral diplomacy, multilateral diplomacy, NGOs, US state/federal international relations opportunities, and more.

0101	Sarah Wolek M 1:00pm - 1:50pm	Seats (Total: 30) TYD 1114

GVPT319F **Topics in Social Advocacy; Careers in Environment Sustainability**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Reading, research and discussion of variety of topics related to social advocacy.

An overview of careers in environmental sustainability. We will discuss careers in clean tech, advocacy/policy, supply chain management/sourcing, conservation, and much more with a lens of water, land, and air.

0101	Sarah Wolek M 12:00pm - 12:50pm	Seats (Total: 30) TYD 1114

GVPT319G **Topics in Social Advocacy; Contemporary Legal Issues**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Reading, research and discussion of variety of topics related to social advocacy.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. Co-requisite: GVPT432.

0101	Robin Earnest M 2:00pm - 2:50pm	Seats (Total: 25) TYD 1102
0201	Robin Earnest W 2:00pm - 2:50pm	Seats (Total: 25) TYD 1102
0301	Robin Earnest Th 1:00pm - 1:50pm	Seats (Total: 25) TYD 2110

GVPT331 **Courts, Law and Justice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT170.

An introductory course to the study of law with emphasis on how lawyers and judges think and argue. Topics include, contract law, property, family law, torts, and criminal procedure.

This course is a duplication of GVPT331, Law and Society.

0101	Michael Spivey MW 1:00pm - 1:50pm F 9:00am - 9:50am	Seats (Total: 25) JMZ 0220 TWS 1107	Discussion
0102	Michael Spivey MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 25) JMZ 0220 TWS 1321	Discussion
0103	Michael Spivey MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 25) JMZ 0220 EDU 3233	Discussion
0104	Michael Spivey MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 25) JMZ 0220 BPS 1236	Discussion
0105	Michael Spivey MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 25) JMZ 0220 TYD 1114	Discussion
0106	Michael Spivey MW 1:00pm - 1:50pm F 2:00pm - 2:50pm	Seats (Total: 25) JMZ 0220 TYD 1118	Discussion

GVPT349 **Topics in Political Philosophy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political philosophy.

Contact department for information to register for this course.

GVPT349Z **Topics in Political Philosophy; Political Thought**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political philosophy.

Contact department for information to register for this course.

GVPT355 **Capstone in International Conflict Management**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT354. Restriction: Enrollment is restricted to students in the Minor in International Development and Conflict Management; and sophomore standing or higher; and permission of BSOS-Government & Politics department.

Serves as one of the two capstone courses for the Minor in International Development and Conflict Management. Focuses on advanced theory and the practice and profession of international conflict management and is designed to provide students an introduction to, and a chance to engage with, a core set of practical skills relevant to the field.

0101	Leonard Hawley, Michael Hess, James Covey W 3:30pm - 6:15pm	Seats (Total: 40) TYD 1132

GVPT356 **Capstone in International Development**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP, DVCC

Prerequisite: GVPT354. Restriction: Enrollment is restricted to students in the Minor in International Development and Conflict Management; and sophomore standing or higher; and permission of BSOS-Government & Politics department.

Serves as one of the two capstone courses for the Minor in International Development and Conflict Management. Focuses on advanced theory and the practice and profession of international development and is designed to provide students an introduction to, and a chance to engage with, a core set of practical skills relevant to the field.

A Fearless Ideas Course from the Academy for Innovation & Entrepreneurship (AIE): http://ter.ps/iamFEARLESS Click here for more information on the Fearless Ideas Courses.

0101	Stacy Kosko Tu 2:00pm - 4:45pm	Seats (Total: 40) ESJ 2212
0201	Stacy Kosko Tu 9:00am - 11:45am *This is a Global Classroom course.*	Seats (Total: 25) HJP 3120

GVPT358A **Study Abroad Seminar in Political Science; Migration and Multiculturalism in Europe**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358D **Study Abroad Seminar in Political Science; Politics and Economy of Spain**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358F **Study Abroad Seminar in Political Science; Government and Politics in France**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358G **Study Abroad Seminar in Political Science; History and Politics of Modern Italy: The 20th Century**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358N **Study Abroad Seminar in Political Science; Spain in the 21st century: Nationalism, Populism and Social Movements**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358O **Study Abroad Seminar in Political Science; Comparative Politics & Government**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358P **Study Abroad Seminar in Political Science; Political Rhetoric: Blogs, Speeches, and Spin**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358R **Study Abroad Seminar in Political Science; Religion and Politics in Europe**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358W **Study Abroad Seminar in Political Science; Poltical and Social Change**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT359 **Topics in Comparative Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in comparative politics.

Contact department for information to register for this course.

GVPT359F **Topics in Comparative Politics; Issues in African Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The study of topics in comparative politics.

Also offered as AASP398D, GEOG398A, and SOCY398Y. Credit only granted for AASP398D, GEOG398A, GVPT359F, or SOCY398Y.

0101	Sangeetha Madhavan	Seats (Total: 20)
	W 2:00pm - 4:30pm	HBK 0108

GVPT359Z **Topics in Comparative Politics; Parliament, Politics and Policy Making**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in comparative politics.

Contact department for information to register for this course.

GVPT368N **Special Topics in Government and Politics; American Jewry and Public Policy**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The study of topics in government and politics.

Also offered as JWST429M. Credit only granted for JWST429M or GVPT368N. An examination of the contours of American Jewry and its engagement in public policy. Focus will be on historical development, Jewish political thought, organizational and representation structures. Areas of specific concern include Israel and foreign policy, as well as domestic topics, including electoral politics. A number of in-depth case studies will be examined.

0101	Scott Lasensky	Seats (Total: 40)
	Tu 4:00pm - 6:30pm	HJP 2114

GVPT386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Restriction: Permission of BSOS-Government & Politics department; and junior standing or higher.

Contact department for information to register for this course.

GVPT388 **Topical Investigations**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Independent research and writing on selected topics in government and politics.

Permission of Director of Undergraduate Studies required.

Contact department for information to register for this course.

GVPT388L **Topical Investigations; Maryland Politics, Policy, and Leadership**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Independent research and writing on selected topics in government and politics.

This course will examine Maryland's political history, its present, and potential future. Attention will be focused on the legislative process and the legislative institution. We will discuss current policy issues before the General Assembly and the State as well as methods by which to approach issues, develop possible solutions, and negotiate agreements. The course will be led by an individual with extensive experience in the Maryland legislative branch.

0101	Karl Aro TuTh 3:30pm - 4:45pm	Seats (Total: 30) TYD 1132

GVPT388M **Topical Investigations; Mock Trial Independent Study**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail

Independent research and writing on selected topics in government and politics.

Prerequisite: Permission of department.

0101	William Mundy W 6:30pm - 9:15pm	Seats (Total: 15) TYD 2110

GVPT388W **Topical Investigations; Experiential Learning: Maryland, Public Policy and Beyond**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Independent research and writing on selected topics in government and politics.

Students interested in registering for this course must have an internship secured and must apply to the CAPC Internship Program; the application is available at the link below. Required in-person class meetings will take place 6:30pm - 9:15pm on the following Tuesdays: January 29th, March 5th, April 9th, and May 7th.

0101	Casey Burgat Class time/details on ELMs Tu 6:30pm - 9:15pm	Seats (Total: 40) ONLINE Location: TBA

GVPT389 **Experiential Learning II**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail, Audit

Experiential credit for working in government & politics related internships, research, and teaching opportunities.

Junior standing.

Contact department for information to register for this course.

GVPT390 **Game Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must not have completed ECON414. Credit only granted for: GVPT399A, GVPT390, CMSC474 or ECON414. Formerly: GVPT399A.

Introduction to game theory with applications to political science, economics and sociology. Topics include preference theory, expected utility theory, Nash equilibria, subgame perfection, repeated games, folk theorems, and evolutionary stability.

0101	Piotr Swistak	Seats (Total: 30)
	Tu 2:00pm - 4:45pm	TYD 1101

GVPT396 **Introduction to Honors Research**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Government & Politics Honors Program; and must have permission of the Government & Politics Honors Program.

A required course for all honors students designed to emphasize library research, methodology, and writing skills in political science and political philosophy. A written proposal, bibliography and research design for an honors paper required of all students as a final project.

Contact department for information to register for this course.

GVPT397 **Honors Research**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: GVPT396. Restriction: Must be in Government & Politics Honors Program.

Individual reading and research. Preparation of an original paper.

Contact department for information to register for this course.

GVPT399 **Seminar in Government and Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399C **Seminar in Government and Politics; Cultures Without State: The Case of Catalonia**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399D **Seminar in Government and Politics; Society and Politics in Contemporary Spain**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399E **Seminar in Government and Politics; The European Union: Politics and Policy**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399I **Seminar in Government and Politics; Globilization**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399J **Seminar in Government and Politics; Modern British Politics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399K **Seminar in Government and Politics; Structure and Process in International Relations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399L **Seminar in Government and Politics; British Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399M **Seminar in Government and Politics; Policy Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399O **Seminar in Government and Politics; Parliament Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399P **Seminar in Government and Politics; Foreign Policy Analysis**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399Q **Seminar in Government and Politics; Security and Defense Policy in the European Union**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399R **Seminar in Government and Politics; Modern American Government**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399T **Seminar in Government and Politics; Social Policy, Social Exclusion**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399V **Seminar in Government and Politics; Political Economy of China and Japan**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399W **Seminar in Government and Politics; International Economic Organizations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399X **Seminar in Government and Politics; Politics of the Balkan**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399Y **Seminar in Government and Politics; Political Economy of Sustainable Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399Z **Seminar in Government and Politics; International Security**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT402 **International Law**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT200. Restriction: Must be in Government & Politics program; and junior standing or higher.

A study of the basic character, general principles and specific rules of international law, with emphasis on recent and contemporary trends in the field and its relation to other aspects of international affairs.

Contact department for information to register for this course.

GVPT406 **International Organizations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT200. Restriction: Must be in Government & Politics program; and junior standing or higher. Or must be in Government & Politics: International Relations program; and junior standing or higher.

A basic introduction to the full range of international organizations that have come into being over the past century and one-half, including those that aspire to be universal or global, those with a geopolitical or regional focus, and those that address specific structural or functional areas of human endeavor or issue areas.

Contact department for information to register for this course.

GVPT409A **Seminar in International Relations and World Politics; Peace, Justice, and Conflict Resolution**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Gabriella Lloyd TuTh 2:00pm - 3:15pm	Seats (Total: 30) TLF 1101

GVPT409G **Seminar in International Relations and World Politics; Corporations and the Global Political Economy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Virginia Haufler MW 3:00pm - 4:15pm	Seats (Total: 75) TWS 0310

GVPT409H **Seminar in International Relations and World Politics; International Relations of the Middle East**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in the Government & Politics Honors program. This seminar will evaluate major issues of the international relations of the Middle East and the American role and responses to these issues. The seminar will focus on several post-Cold-War cases in American foreign policy, including the 1991 and 2003 Gulf wars, policy toward Iran, American mediation in the Arab-Israeli conflict, responses to the Arab Uprisings, Re-emerging competition with Russia, and broader issues such as regional reform and nuclear non-proliferation.

0101	Shibley Telhami	Seats (Total: 20)
	M 2:00pm - 4:45pm	CHN 2113

GVPT409O **Seminar in International Relations and World Politics; The Politics of Climate Change**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program.

0101	Jennifer Hadden	Seats (Total: 30)
	W 2:00pm - 4:45pm	TLF 1101

GVPT409T **Seminar in International Relations and World Politics; Political Economy of the Middle East**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Contact department for information to register for this course.

GVPT409U **Seminar in International Relations and World Politics; The Politics of Nuclear Weapons Proliferation**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Ottawa Sanders	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	JMZ 0125

GVPT409V **Seminar in International Relations and World Politics; Game Theory and International Security**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Contact department for information to register for this course.

GVPT409W **Seminar in International Relations and World Politics; Southeast Asia in Contemporary Global Politics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Jennifer Wallace	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	TYD 2110

GVPT409X **Seminar in International Relations and World Politics; Arms Control in the Nuclear Realm**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Contact department for information to register for this course.

GVPT409Y **Seminar in International Relations and World Politics; Arab-Israeli Relations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Contact department for information to register for this course.

GVPT409Z **Seminar in International Relations and World Politics; International Relations: Theory and Institutions**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restricted to undergraduate GVPT majors only. All other majors placed on hold-file.

Contact department for information to register for this course.

GVPT420 **The Logic and Practice of Measuring Political Behavior**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT201. Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program.

Introduction to concepts and practices used for measuring political behavior. Political analysis is an increasingly quantitative field. It is crucial for students of political behavior to learn how to define concepts in concrete ways, examine different methods of measuring concepts, learn how to test the quality of chosen measures, learn how to construct richer measures out of multiple questions, and finally how to examine the relationship between multiple measures of similar concepts. Common pitfalls, errors, bias, and ethics will be examined along the way.

0101	Lilliana Mason	Seats (Total: 30)
	Tu 2:00pm - 4:45pm	TYD 2108

GVPT423H **Elections and Electoral Behavior**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT241 and GVPT170. Restriction: Must be in Government & Politics program.

An examination of various topics relating to elections; the focus includes the legal structure under which elections are conducted, the selection and nomination process, the conduct of election campaigns, and patterns of political participation and voting choice in different types of elections.

Restriction: Must be in the Government and Politics Honors Program.

0101	James Gimpel Tu 2:00pm - 4:45pm	Seats (Total: 20) TYD 1114

GVPT429E **Problems in Political Behavior; Public Opinion and Partisanship**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

The problem approach to political behavior with emphasis on theoretical and empirical studies on selected aspects of the political process.

Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program. This course is an advanced seminar on voters in the American political system. Broadly, we will cover topics ranging from what factors influence how individuals vote to discussions of social groups, partisanship, opinions, and other characteristics that shape Americans as political actors.

0101	Lilliana Mason TuTh 11:00am - 12:15pm	Seats (Total: 30) TYD 2102

GVPT432 **Civil Rights and the Constitution**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT170 and GVPT331. Restriction: Must be in one of the following programs (Government & Politics; Government & Politics: International Relations).

A study of civil rights in the American constitutional context, emphasizing freedom of religion, freedom of expression, minority discrimination, and the rights of defendants.

Co-requisite: GVPT319G.

0101	Michael Spivey MW 3:00pm - 4:15pm	Seats (Total: 75) TYD 1102

GVPT439A **Seminar in Public Law; Comparative Constitutional Law**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in public law. Both substantiv issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program.

0101	Karol Soltan TuTh 11:00am - 12:15pm	Seats (Total: 30) LEF 1201

GVPT439D **Seminar in Public Law; Big Issues Facing Humanity**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in public law. Both substantiv issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. This course will consider four big issues facing humanity: What is the future for democracy? What is the futurefor capitalism? What is the is the future for the natural environment? Whatis the future for justice?

0101	Karol Soltan TuTh 2:00pm - 3:15pm	Seats (Total: 30) TYD 2111

GVPT439F **Seminar in Public Law; Constitutional Issues in Law Enforcement**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in public law. Both substantiv issues and methodological approaches will be considered.

SG91	James Trusty Tu 6:30pm - 9:00pm	Seats (Total: 30) BLD3 2225
SG92	James Trusty Tu 6:30pm - 9:00pm *Limit to Communication students at Shady Grove.*	Seats (Total: 5) Location: TBA

GVPT442 **History of Political Theory--Medieval to Recent**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT241. Restriction: Must be in Government & Politics program.

A survey of the principal theories set forth in the works of writers from Machiavelli to Nietzsche.

Contact department for information to register for this course.

GVPT443 **Contemporary Political Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT241. Restriction: Must be in Government & Politics program.

A survey of the principal political theories and ideologies set forth in the works of writers from Karl Marx to the present.

Contact department for information to register for this course.

GVPT445 **Marxism and Postmarxism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major within BSOS-Government & Politics department.

The study of Marxist thought and an assessment of the critical transformations and reassessments of the theory and practice of Marxism.

0101	Vladimir Tismaneanu	Seats (Total: 30)
	Th 2:00pm - 4:45pm	TYD 1114

GVPT449G **Seminar in Political Philosophy; Global Justice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in political philosophy. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program. The course begins by laying the foundation for the debate over the scope and limits of global justice, and then examines some topics that arise when thinking globally about justice, such as poverty, the environment and waging war. The course ends by considering the possibility of creating a cosmopolitan framework within which to adjudicate between competing interests in the globalized world.

0101	Sujith Kumar	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	SKN 1115

GVPT449I **Seminar in Political Philosophy; Political Ideologies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in political philosophy. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program. A survey of political ideologies. The course begins by tracing the lineage of liberal democracy from Ancient Greece to modern conceptions of democracy. It then considers theoretical and political responses to this lineage, from within and out of the tradition.

0101	Sujith Kumar	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	TYD 1102

GVPT449X **Seminar in Political Philosophy; Ethics & Global Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in political philosophy. Both substantive issues and methodological approaches will be considered.

Contact department for information to register for this course.

GVPT449Y **Seminar in Political Philosophy; Environmental Political Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in political philosophy. Both substantive issues and methodological approaches will be considered.

Contact department for information to register for this course.

GVPT456 **The Politics of Terrorism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT200. Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program. Credit only granted for: GVPT456 or GVPT459T. Formerly: GVPT459T.

Examination of the definition, causes and organization of terrorist activity, along with key domestic and international counter- and anti-terrorism responses. Special emphasis on challanges and opportunities to the scientific study of terrorism.

0101	Kanisha Bond	Seats (Total: 30)
	TuTh 9:30am - 10:45am	TYD 1114

GVPT458A **Special Topics in Study Abroad IV; Inequality, Poverty and Globalization**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GVPT458C **Special Topics in Study Abroad IV; Politics, War and Economics in the Age of Globalization**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GVPT458G **Special Topics in Study Abroad IV; Czech Society Transformation**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GVPT458J **Special Topics in Study Abroad IV; Economic and political Institutions of the European Union**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GVPT458K **Special Topics in Study Abroad IV; Themes and Issues in Transatlantic Relations**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GVPT458O **Special Topics in Study Abroad IV**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GVPT458Q **Special Topics in Study Abroad IV; Islam and Europe: Historical and Contemporary Dimensions**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GVPT458R **Special Topics in Study Abroad IV; Terrorism and Counterterrorism in International Politics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GVPT458U **Special Topics in Study Abroad IV; Spanish History and Politics: 1936 to the Present**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GVPT458X **Special Topics in Study Abroad IV; European Legal Traditions**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GVPT458Y **Special Topics in Study Abroad IV; Environmental Politics and Policy in Europe**

Credits: 1-6

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GVPT458Z **Special Topics in Study Abroad IV; Contemporary Germany in European Perspective**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

GVPT459H **Seminar in Comparative Politics; Jewish Politics**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in the Government & Politics Honors program.

0101	Mark Lichbach W 2:00pm - 4:45pm	Seats (Total: 20) TYD 1108

GVPT459M **Seminar in Comparative Politics; Social Movements**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Kanisha Bond TuTh 12:30pm - 1:45pm	Seats (Total: 30) TYD 1118

GVPT459N **Seminar in Comparative Politics; Gender and Politics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Noa Balf TuTh 9:30am - 10:45am	Seats (Total: 30) TYD 2110

GVPT459P **Seminar in Comparative Politics; The Revolutions of 1989 and Their Consequences: Communism and Post-Communism in East-Central Europe**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations Program.

0101	Vladimir Tismaneanu	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	TYD 1114

GVPT459Q **Seminar in Comparative Politics; Nationalism: Past, Persistence, and Prospects**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. An exploration of the political impact of nationalism. The course examines the nature and origins of nationalism, change and variation between civic forms of nationalism and both ethnic and religious nationalism, and how nationalism shapes and is shaped by domestic and foreign politics. The course will also explore the relationship between nationalism and populism in contemporary society.

0101	Brandon Ives	Seats (Total: 30)
	M 6:30pm - 9:15pm	TYD 2110

GVPT459U **Seminar in Comparative Politics; Researching the Middle East**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Prerequisite: Minimum grade of C- in SOCY201, SOCY202, and SOCY203 or permission of department. Also offered as SOCY480. Credit only granted for SOCY480, SOCY498E or GVPT459U. Introduces religion, gender, and politics in the Middle East and North Africa. After an overview of the political and social history the focus will be on methods for carrying out fundamental issues facing Middle Eastern societies, including national identity, religion, gender relations and the status of women in the family, politics, education, and labor market.

0101	Mansoor Moaddel	Seats (Total: 29)
	TuTh 3:30pm - 4:45pm	ASY 3215

GVPT459V **Seminar in Comparative Politics; Gender, Conflict, and Security**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Noa Balf	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TYD 1101

GVPT461 **Local Politics and Government**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT170. Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program. Credit only granted for: GVPT461 or GVPT479L. Formerly: GVPT479L.

An introduction to local government and politics in the U.S. context. The course explores the evolution of local jurisdictions, particularly cities, and the politics of local level decision making.

0101	Richard Engstrom	Seats (Total: 30)
	MW 2:00pm - 3:15pm	TYD 2102

GVPT474 **Political Parties**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT241 and GVPT170. Restriction: Must be in Government & Politics program.

A descriptive and analytical examination of American political parties, nominations, elections, and political leadership.

0101	David Karol	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	TYD 0102

GVPT475 **The Presidency and the Executive Branch**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT241 and GVPT170. Restriction: Must be in Government & Politics program; and junior standing or higher.

An examination of the U.S. presidency in historical and contemporary perspective: nomination and electoral politics and the president's place in policy-making, administration, and public opinion.

0101	David Karol	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TYD 0102

GVPT477 **Voting and Participation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT170 and GVPT241. Restriction: Must be in Government & Politics program.

A study of the factors that influence individual vote choice and voter participation in the U.S. The course will introduce political science research pertaining to both topics and will engage current controversies over such things as political campaign laws and the various state and federal rules that govern election administration.

0101	Michael Hanmer	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	TYD 2109

GVPT481 **Government and Administration of Russia and the States of the Former Soviet Union**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT200; and (GVPT282 or GVPT280). Restriction: Must be in Government & Politics program.

A comparative study of the governmental systems and political processes of the states of the former Soviet Union.

Contact department for information to register for this course.

GVPT485 **Government and Politics of the Middle East**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GVPT200; and (GVPT282 or GVPT280). Restriction: Must be in Government & Politics program.

A comparative study of the governmental systems and political processes of the African countries, with special emphasis on the problems of nation-building in emergent countries.

Contact department for information to register for this course.

GVPT722 **Advanced Quantitative Methods For Political Science**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: GVPT622; or permission of instructor.

Introduction to multivariate analysis. Elementary matrix algebra, multiple linear and curvilinear correlation and regression, analysis of variance, canonical correlation and regression, discriminant analysis, and several types of factor analysis.

0101	Patrick Wohlfarth M 3:30pm - 6:15pm	Seats (Total: 12) LEF 0229
0201	Patrick Wohlfarth Contact instructor or department for details.	Seats (Total: 12)

GVPT771 **Seminar in American Political Behavior**

Credits: 3 Grading Method: Regular, Audit

This is the core seminar in American political behavior. The course wil deal with prominent theoretical and empirical issues in the areas of voting, public opinion, political participation and other aspects of political behavior in the American context.

0101	James Gimpel M 12:30pm - 3:15pm	Seats (Total: 12) TYD 1111

GVPT799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

GVPT803 **Seminar in International Political Organization**

Credits: 3 Grading Method: Regular, Audit

A study of the forms and functions of various international organizations.

0101	Todd Allee Tu 3:30pm - 6:15pm	Seats (Total: 12) TYD 1136

GVPT808B **Selected Topics in Functional Problems in International Relations; Conflict and World Politics**

Credits: 3 Grading Method: Regular, Audit

An examination of the major substantive issues in contemporary international relations.

0101	Gabriella Lloyd Tu 9:30am - 12:15pm	Seats (Total: 12) TYD 1136

GVPT828B **Selected Problems in Political Behavior; Race and Ethnic Politics**

Credits: 3 Grading Method: Regular, Audit

Individual reading and research reports on selected problems in the study of political behavior.

0101	Antoine Banks Tu 12:30pm - 3:15pm	Seats (Total: 12) TYD 1111

GVPT831 **Formal Theories of Politics I**

Credits: 3 Grading Method: Regular, Audit

Survey of major formal theories of politics, with emphasis on those theories based on the assumptions of rationality. The theory of public goods, game theory, coalition theory, and the theoretical properties of voting systems.

0101	William Reed Th 12:30pm - 3:15pm	Seats (Total: 12) ESJ B0320
0201	William Reed Contact instructor or department for details.	Seats (Total: 12)

GVPT834 **Game Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Introduction to game theory with applications to social sciences. Topics include preference theory, expected utility theory, Nash equilibria, subgame perfection, repeated games, folk theorems, and evolutionary stability.

0101	Piotr Swistak Th 2:00pm - 4:45pm	Seats (Total: 12) TYD 1101

GVPT849 **Readings in Government and Politics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Guided readings and discussions on selected topics in political science

Contact department for information to register for this course.

GVPT888P **Selected Topics in Comparative Governmental Institutions; Political Institutions**

Credits: 3 Grading Method: Regular, Audit

An examination of special topics in comparative politics.

0101	Ernesto Calvo	Seats (Total: 12)
	W 12:30pm - 3:15pm	TYD 1136

GVPT898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Guided readings and discussions on selected topics in political science.

Contact department for information to register for this course.

GVPT899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

HACS ACES-Cybersecurity Spring 2019

HACS101 **Applied Cybersecurity Foundations**

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in HACS100. Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

Prepares students for team research that will be conducted in HACS 200. Students gain an understanding across the breadth of cybersecurity including system monitoring, networking basics and penetration testing. An applied approach to statistics is also included to prepare students to assess the data collected for their research projects. The course is conducted with a hands-on approach applying virtual environments to practice the concepts learned in the technical lectures each week.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program. Prerequisite: HASC100

0101	Jandelyn Plane	Seats (Total: 25)
	TuTh 2:00pm - 2:50pm	PFH 1111

0201	Jandelyn Plane TuTh 3:00pm - 3:50pm	Seats (Total: 30) PFH 1111
0301	Jandelyn Plane TuTh 4:00pm - 4:50pm	Seats (Total: 25) PFH 1111

HACS208A **Seminar in Cybersecurity; Accounting and Economic Aspects of Cybersecurity**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program. Repeatable to 6 credits if content differs.

0101	Lawrence Gordon TuTh 2:00pm - 3:15pm	Seats (Total: 20) VMH 1307

HACS208E **Seminar in Cybersecurity; Introduction to Reverse Engineering**

Credits: 3 Grading Method: Regular General Education: DSSP

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program. Repeatable to 6 credits if content differs.

0101	Aaron Hertz W 3:00pm - 5:45pm	Seats (Total: 25) PFR 0103

HACS208I **Seminar in Cybersecurity; Security Incident Handling and Management**

Credits: 3 Grading Method: Regular General Education: DSSP

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program. Repeatable to 6 credits if content differs.

0101	Paul Bellis	Seats (Total: 25)
	Tu 5:00pm - 7:45pm	PFR 0103

HACS208P **Seminar in Cybersecurity; Beyond Technology, the Policy Implications of Cyberspace**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program. Repeatable to 6 credits if content differs.

0101	Charles Harry	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	PFR 1111

HACS279 **Undergraduate Research in Cybersecurity**

(Perm req)

Credits: 1-3 Grading Method: Regular

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in research in order to gain greater insight into a specific area within cybersecurity, obtain an appreciation for the subtleties and difficulties associated with the production of knowledge and fundamental new applications, and to prepare for graduate school and the workforce.

Contact department for information to register for this course.

HACS287 **Undergraduate Research in Cybersecurity**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program; and permission of UGST-HCOL-ACES Cybersecurity Program.

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in research in order to gain greater insight into a specific area within cybersecurity, obtain an appreciation for the subtleties and difficulties associated with the production of knowledge and fundamental new applications, and to prepare for graduate school and the workforce.

Contact department for information to register for this course.

HACS297 **Cybersecurity Experience Reflection**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program; and permission of UGST-HCOL-ACES Cybersecurity Program.

Cybersecurity experience is defined as an experiential learning activity either with a University of Maryland entity (such as the Division of Information Technology, the ACES competition team or in an ACES outreach program), or with an external organization that will provide valuable, hands-on experience to supplement the knowledge learned in the other ACES coursework.

0101	Christal Dimas	Seats (Total: 20)
	M 4:00pm - 6:45pm	PFR 1111

HACS318A **Cybersecurity Professionals Colloquium Series; Current Issues**

Credits: 1 Grading Method: Regular

The Cybersecurity Professionals Colloquium Series explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. The colloquium series consists of guest lectures of cybersecurity professionals. In written assignments, students will not only summarize the lecture content but also reflect on the significance of the lecture content for the field of cybersecurity.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program

0101	Jessica Harrington	Seats (Total: 75)
	W 6:30pm - 7:20pm	PFR 1105

HACS408D **Advanced Seminar in Cybersecurity; Leadership, Inclusion and Diversity**

Credits: 3 Grading Method: Regular

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program. Students will be invited to explore concepts of leadership, power and diversity, as well as learn to identify what leadership success looks like. Through a presentation of leadership techniques and tools, skills-building exercises, real-life case studies and interactions with leaders from all around the world, students will be equipped with the knowledge they need to step into leadership capacity and become an impactful leader themselves. Students will also get to dive into the leadership realities within the Cybersecurity sector and understand how their future leadership could promote a more inclusive and diverse sector.

0101	Emily Francoise-Bove	Seats (Total: 25)
	M 2:00pm - 4:45pm	PFR 1105

HACS408F **Advanced Seminar in Cybersecurity; Comparative International Cybersecurity Policy**

(Perm req)

Credits: 3 Grading Method: Regular

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program.

0101	Kelly Wong W 3:30pm - 6:15pm	Seats (Total: 15) SQH 1125

HACS408T **Advanced Seminar in Cybersecurity; Penetration Testing**

Credits: 3 Grading Method: Regular

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program.

0101	Kevin Bock M 5:00pm - 7:45pm	Seats (Total: 20) PFR 0103

HACS408V **Advanced Seminar in Cybersecurity; Data Analysis and Visualization for Cybersecurity**

Credits: 3 Grading Method: Regular

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program. Credit only granted for HACS402 or HACS408V.

0101	Edward Condon TuTh 5:00pm - 6:15pm	Seats (Total: 25) ATL 2416

HACS479 **Undergraduate Research in Cybersecurity**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in research in order to gain greater insight into a specific area within cybersecurity, obtain an appreciation for the subtleties and difficulties associated with the production of knowledge and fundamental new applications, and to prepare for graduate school and the workforce.

Contact department for information to register for this course.

HACS498 **Cybersecurity Group Problem Solving**

(Perm req)

Credits: 3 Grading Method: Regular

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in team problem solving activities in order to gain greater insight into a specific area within cybersecurity and to obtain an appreciation for the subtleties and difficulties associated with these activities in order to prepare students for graduate school and the workforce. Students engage in a semester long problem solving or development project under the mentorship of a industry specialist and with the guidance of university faculty. Through the exercise the students will develop teamwork experience and professional communication skills in addition to experience of the project itself. The project might be evaluation, creation, testing or analysis of some area of cybersecurity as needed by the mentor-sponsor. A contract of what will be accomplished is required must be agreed upon by the mentor, the student and the ACES leadership before the project can begin.

0101	Jandelyn Plane Contact instructor or department for details.	Seats (Total: 5)
0201	Ryan Kranz, Darren King Contact instructor or department for details.	Seats (Total: 5)
0301	Howard Michael, Katherine Massey, Joseph Dougherty Contact instructor or department for details.	Seats (Total: 5)

HDCC Design Cultures and Creativity Spring 2019

HDCC106 **Introduction to Digital and Creativity II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Restriction: Must be in the Digital Cultures and Creativity Honors College Living/Learning program.

Introduction to the methods and theory of digital cultural production, with emphasis on creative and expressive platforms.

0101	Alexis Lothian TuTh 11:00am - 12:15pm	Seats (Total: 15) PFR 0111

0201	Sahar Khamis Th 3:00pm - 5:30pm	Seats (Total: 15) JMZ 1226
0301	Evan Golub MW 3:30pm - 4:45pm	Seats (Total: 15) PFR 0111
0401	Daniel Greene MW 1:00pm - 2:15pm	Seats (Total: 15) PFR 0111

HDCC209A **Practicum in Digital Cultures and Creativity**

Credits: 2 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Practicum in Digital Cultures and Creativity in which students will develop their program capstone projects under the supervision of a faculty mentor, with regular checkpoints and presentations to track progress.

0101	DB Bauer W 5:00pm - 6:45pm	Seats (Total: 15) PFR 0111

HDCC209B **Practicum in Digital Cultures and Creativity**

Credits: 2 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Practicum in Digital Cultures and Creativity in which students will develop their program capstone projects under the supervision of a faculty mentor, with regular checkpoints and presentations to track progress.

0101	Porter Olsen TuTh 12:30pm - 1:20pm	Seats (Total: 15) PFR 0111

HDCC209C **Practicum in Digital Cultures and Creativity**

Credits: 2 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Practicum in Digital Cultures and Creativity in which students will develop their program capstone projects under the supervision of a faculty mentor, with regular checkpoints and presentations to track progress.

0101	Joseph Meyer Th 4:00pm - 5:45pm	Seats (Total: 15) PFR 0111

HDCC209D **Practicum in Digital Cultures and Creativity**

Credits: 2 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Practicum in Digital Cultures and Creativity in which students will develop their program capstone projects under the supervision of a faculty mentor, with regular checkpoints and presentations to track progress.

0101	Jarah Moesch	Seats (Total: 15)
	Tu 2:00pm - 3:45pm	PFR 0111

HDCC209E **Practicum in Digital Cultures and Creativity**

Credits: 2 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Practicum in Digital Cultures and Creativity in which students will develop their program capstone projects under the supervision of a faculty mentor, with regular checkpoints and presentations to track progress.

0101	Porter Olsen	Seats (Total: 15)
	M 5:00pm - 6:45pm	PFR 0111

HDCC379 **Digital Cultures and Creativity Independent Study**

Credits: 1-3 | Grading Method: Regular

Involves research and/or creative scholarship directed by individual DCC faculty outside of the formal classroom structure.

0101	Jason Farman	Seats (Total: 5)
	Contact instructor or department for details.	

HEBR Hebrew Spring 2019

HEBR107 **Intensive Elementary Hebrew II**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HEBR106 or HEBR111; or must have appropriate score on Foreign Language Placement Assessment; or students who have taken courses with comparable content may contact the department. Credit only granted for: HEBR107 or HEBR112.

A continuation of intensive study of fundamentals of Hebrew reading, writing, listening, speaking and Israeli culture. Covers past tense in all verb categories, basic syntax and builds vocabulary.

0101	Avital Karpman	Seats (Total: 25)
	TuTh 11:00am - 12:15pm Class time/details on ELMs	JMZ 3205 ONLINE

For other courses, see JWST - Jewish Studies.

HEBR112 **Elementary Hebrew II**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HEBR111; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not have completed HEBR103; and must not have completed HEBR104. Credit only granted for: (HEBR103 and HEBR104) or HEBR112.

Continuation of HEBR 111.

Contact department for information to register for this course.

HEBR207 **Intensive Intermediate Hebrew II**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed HEBR206 OR HEBR211; or have the appropriate Score on the Foreign Language Placement Assessment; or students who have taken courses with comparable content may contact the department. Credit only granted for: HEBR207 or HEBR212.

A review of the fundamentals of Hebrew grammar, reading, writing, listening and speaking.

0101	Aharona Rosenthal	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm Class time/details on ELMs	JMZ 1103 ONLINE

HEBR212 **Intermediate Hebrew II**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: HEBR211; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not have completed HEBR203; and must not have completed HEBR204. Credit only granted for: (HEBR203 and HEBR204) or HEBR212.

Continuation of HEBR211.

Contact department for information to register for this course.

HEBR249E **Special Topics in Hebrew Studies; Israeli Innovations and Entrepreneurship**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

A broad range of cultural and societal topics pertaining to the communication of Hebrew.

Also offered as ISRL249L. Credit only granted for HEBR249E or ISRL249L. Prerequisite: HEBR207. Taught in Hebrew. Focus on present-day and historical authentic materials such as media clips and articles, advertising, podcasts, and interviews that explain Israel's reputation as a leader in innovation and a "start-up nation." Students will produce oral and written business plans. This is a CourseShare online course open to students from other BTAA campuses. Please contact the instructor, Dr. Avital Karpman, with any questions you may have: akarpman@umd.edu.

0101	Avital Karpman Class time/details on ELMs	Seats (Total: 25) ONLINE
0201	Avital Karpman Class time/details on ELMs	Seats (Total: 25) ONLINE

HEBR314 **Conversation and Composition II**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHU

Prerequisite: HEBR313; or students who have taken courses with comparable content may contact the department.

A practical language course recommended for all students continuing with Hebrew. Review of grammar and composition. Selected readings. Oral and written exercises.

0101	Aliza Sandalon Class time/details on ELMs	Seats (Total: 15) ONLINE

HEBR369A **Special Topics in Study Abroad III; Hebrew Lower Advanced**

Credits: 6

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

HEBR369B **Special Topics in Study Abroad III; Hebrew Lower Advanced**

Credits: 6

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

HEBR369C **Special Topics in Study Abroad III; Hebrew Upper Advanced**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

HEBR369D **Special Topics in Study Abroad III; Hebrew Upper Intermediate**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

HEBR381 **Introduction to Hebrew Cultural Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HEBR314; or permission of instructor. Also offered as: JWST381. Credit only granted for: HEBR381 or JWST381.

Critical study of Israeli culture with emphasis on literature, film, and art as sites of struggle over political and social meaning during times of cultural transformation. Focus on the historical development of Israeli identity and gender, in particular within the military and Zionist youth movements. Taught in Hebrew.

Contact department for information to register for this course.

HEBR386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Must have a Learning Proposal approved by the Office of Experiential Learning Programs, faculty sponsor, and student's internship sponsor; and junior standing or higher.

Contact the department to obtain section numbers.

Contact department for information to register for this course.

HEBR499 **Independent Study in Hebrew**

(Perm req)

Credits: 1-3 Grading Method: Regular

Independent study under faculty supervision.

Contact the department to obtain section numbers.

Contact department for information to register for this course.

HEIP Entrepreneurship and Innovation Spring 2019

HEIP144 **Contemporary Issues in Entrepreneurship and Innovation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HEIP143. Restriction: Must be in the Entrepreneurship and Innovation Program (EIP).

Inspires entrepreneurial innovation and creativity through interactive lectures, workshops, and case studies on contemporary issues to include energy, life sciences, healthcare, and technology. Explores entrepreneurial innovation sources, structures and dynamics. Helps students develop skills for generating ideas and addressing current issues and problems.

Class meets in the LaPlata Hall - multi-purpose room.

0101	Jay Smith TuTh 11:00am - 12:15pm	Seats (Total: 30) LPA 0100
0201	Jay Smith TuTh 2:00pm - 3:15pm	Seats (Total: 30) LPA 0100
0301	Jay Smith TuTh 3:30pm - 4:45pm	Seats (Total: 30) LPA 0100

HEIP241 **EIP Capstone: Creating Enterprise with Social Impact**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in the Entrepreneurship and Innovation Program (EIP).

Addresses the global necessity to develop and implement solutions to critical social and environmental concerns in ways that are both technologically viable and economically sustainable. Through group exercises, guest speakers, discussions, and experiential learning activities, students will develop the skills to create businesses that achieve the double bottom line of both profitability and social benefit.

0101	Jay Smith, John Jabara MW 5:00pm - 5:50pm	Seats (Total: 20) LPA 1125
0201	Jay Smith TuTh 5:00pm - 5:50pm	Seats (Total: 20) LPA 0100

0301	Jay Smith, John Jabara MW 3:00pm - 3:50pm	Seats (Total: 20) LPA 0100

HESI Higher Ed, Student Affairs, and International Ed Policy — Spring 2019

HESI210 **Leadership & Current Issues in Fraternity & Sorority Life**

Credits: 3 Grading Method: Regular

Additional information: The curriculum is designed for emerging leaders, and those interested in taking leadership positions in their organizations or governing council executive board.

The study and practice of leadership carries social, political, and cultural relevance that is inescapable in today's diverse, global and evolving world. This course will survey the study and practice of leadership and provide students with a variety of experiences to wrestle with large leadership questions. Students will explore leadership through a sorority and fraternity lens, leaning about the relationship between the individual, group, and community. A significant portion of this course will focus on fraternity and sorority history, current issues, and creating positive change at the University of Maryland. Students will advance their understanding of self through studying topics of equity, inclusion, and social justice to better develop skills to effectively work across difference.

0101	Christine Licata MW 10:00am - 11:15am	Seats (Total: 25) PLS 1119

HESI217 **Introduction to Student Leadership**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Restriction: Freshman standing; or sophomore standing.

Introduction to leadership theories, concepts, and skills. Completion of personal and leadership self-assessments, values exploration, and small group application.

Students must pay a $32.00 materials fee.

0101	Nancy Camarillo MW 2:00pm - 3:15pm	Seats (Total: 25) SQH 1111
0201	Di-Tu Dissassa TuTh 12:30pm - 1:45pm	Seats (Total: 25) HBK 0123
0301	Michael Brick MW 11:00am - 12:15pm	Seats (Total: 25) ARC 1103

HESI310 **Transfer2Terp Learning Community: Applying Your Strengths at the University of Maryland and Beyond**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Priority will be given to students transferring from Maryland Community Colleges; or permission of EDUC-Counseling, Higher Education and Special Education department.

Students will identify their strengths and learn how to apply them both in and outside of the classroom. Students will work side by side with the faculty and staff in the Adele H. Stamp Student Union to learn about their strengths while applying them to leadership positions.

0101	Luanjiao Hu, Denise McHugh TuTh 11:00am - 12:15pm	Seats (Total: 18) SSU 0110
0201	Luanjiao Hu, Daniel Ostick TuTh 12:30pm - 1:45pm	Seats (Total: 18) SSU 0110

HESI315 **Student Leadership in Groups and Organizations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HESI217. Credit only granted for: HESI315 or EDCP315. Formerly: EDCP315.

Acquiring and integrating leadership knowledge within group and organizational contexts so that students can navigate organizational environments and apply leadership in diverse communities of practice and career contexts.

Students must pay a $15.00 materials fee.

0101	Nancy Camarillo MW 11:00am - 12:15pm *Restricted to students who have completed HESI217 or who have been admitted to the Leadership Studies Program. Email leadershipstudies@umd.edu for permission to enroll.*	Seats (Total: 25) SQH 2120
0201	Anne Spear TuTh 2:00pm - 3:15pm *Restricted to students who have completed HESI217 or who have been admitted to the Leadership Studies Program. Email leadershipstudies@umd.edu for permission to enroll.*	Seats (Total: 25) HBK 0123

HESI318G **Applied Contextual Leadership; Greek Presidents Class**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Course will utilize experiential learning opportunities to develop and apply the knowledge and skills of leadership into specific contexts of leadership practice.

Course restricted to Fraternity and Sorority Presidents. For permission, please contact Michael Goodman at mgood@umd.edu.

0101	Michael Goodman	Seats (Total: 55)
	W 3:30pm - 6:30pm	ESJ 2309

HESI318I **Applied Contextual Leadership; Global Leadership in a Virtual Context**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Course will utilize experiential learning opportunities to develop and apply the knowledge and skills of leadership into specific contexts of leadership practice.

Most course activities will be conducted online, but students will be expected to meet in person 6 times out of the semester. During these sessions, students will interact and learn with students and faculty from Hong Kong Polytechnic University and the Royal University of Phnom Penh (Cambodia) in a virtual classroom environment. Please visit, go.umd.edu/lspglobal or contact instructor, aspear@umd.edu, for more information.

0101	Anne Spear	Seats (Total: 25)
	Contact instructor or department for details. Class time/details on ELMs	ONLINE

HESI318M **Applied Contextual Leadership; Leadership and Education**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Course will utilize experiential learning opportunities to develop and apply the knowledge and skills of leadership into specific contexts of leadership practice.

This course will explore public education policy in the United States, including historical context, the achievement gap, school funding, standardized testing, and alternatives to the current public education system. It will also explore the meaning of leadership in an educational context and advocacy for change within this context. All students enrolled in the course must commit six hours per week of the semester to work with the America Reads, America Counts, or Partners in Print program and must receive permission to enroll by contacting Alison Barlow at abarlow@umd.edu. Visit www.arac.umd.edu for more information about AR*AC*PNP programs.

0101	Alison Barlow Class time/details on ELMs	Seats (Total: 20) ONLINE

HESI318N **Applied Contextual Leadership; Leadership in Collaborative Learning Groups**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Course will utilize experiential learning opportunities to develop and apply the knowledge and skills of leadership into specific contexts of leadership practice.

Restricted to students selected to participate in the Guided Study Session program through the Learning Assistance Service of the Counseling Center.

0101	Danielle Pafe W 5:00pm - 6:15pm Contact instructor or department for details.	Seats (Total: 20) KEY 0119
0201	Danielle Pafe Th 3:30pm - 4:45pm Contact instructor or department for details.	Seats (Total: 20) KEY 0119

HESI318O **Applied Contextual Leadership; Orientation Leader**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Course will utilize experiential learning opportunities to develop and apply the knowledge and skills of leadership into specific contexts of leadership practice.

Restriction: Permission of department.

0101	Janae Cruz, Maya Dawit Tu 6:00pm - 8:30pm	Seats (Total: 25) TWS 1320

HESI321 **Advanced Social Action Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Prerequisite: HESI217 and HESI320. Restriction: Limited to Minor in Leadership Studies students only.

The use of leadership theories to inform the practice of addressing social issues in society, on campus, or within the surrounding community. Students will: identify a current and compelling social issue; explore the historical, social, and political aspects of social issues; identify and select applicable leadership theories to confront the social issue; create and develop a plan that integrates leadership theories and the social issue; and implement and evaluate the overall social action project. Focuses on executing, implementing, and assessing a social action project in small groups and teams.

Designed for students who plan to complete the Leadership Studies Minor Certificate and is a hybrid course which is primarily online with periodical face to face interactions. (TBD once students are enrolled). Please contact instructor for permission to register, chapman3@umd.edu

0101	Courtney Holder	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

HESI417 **Advanced Leadership Seminar**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HESI217; or students who have taken courses with comparable content may contact the department. Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department. Credit only granted for: EDCP417 or HESI417.

Students will analyze and synthesize the concept of leadership using cultural, ethical, sociological, historical perspectives. Exploration and reflection of personal values, decision making, in-depth analysis on various leadership activities. Theories will be emphasized.

Prerequisite: EDCI217 or EDCP315. Permission of instructor.

0101	Craig Slack	Seats (Total: 20)
	F 9:00am - 11:45am	EDU 1315

HESI418B **Special Topics in Leadership; Black Student Leadership**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

The special topics and leadership course will address a single topic related to leadership through the semester. In-depth study and analysis on the topic will be the basis for the course. Topics include gender and leadership, ethics and leadership, and culture and leadership. Leadership will serve as the foundation in the course.

0101	Brandon Dula	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	WDS 1131

HESI418F **Special Topics in Leadership; Jewish Leadership**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVCC

The special topics and leadership course will address a single topic related to leadership through the semester. In-depth study and analysis on the topic will be the basis for the course. Topics include gender and leadership, ethics and leadership, and culture and leadership. Leadership will serve as the foundation in the course.

0101	Ari Israel	Seats (Total: 35)	
	M 2:00pm - 4:45pm	TYD 0117	

HESI418G **Special Topics in Leadership; Women's Leadership**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVCC

The special topics and leadership course will address a single topic related to leadership through the semester. In-depth study and analysis on the topic will be the basis for the course. Topics include gender and leadership, ethics and leadership, and culture and leadership. Leadership will serve as the foundation in the course.

0101	Marsha Guenzler-Stevens	Seats (Total: 20)	
	Tu 2:00pm - 4:45pm	ASY 3217	

HESI470 **Introduction to Student Personnel**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department. Credit only granted for: EDCP470 or HESI470. Formerly: EDCP470.

A systematic analysis of research and theoretical literature on a variety of major problems in the organization and administration of student personnel services in higher education. Included will be discussion of such topics as the student personnel philosophy in education, counseling services, discipline, housing, student activities, financial aid, health, remedial services, etc.

Please contact Aaron Hood (awhood@umd.edu) to get permission.

0101	Aaron Hood	Seats (Total: 9)	
	M 4:00pm - 5:15pm	TWS 0320	
	Tu 3:30pm - 5:00pm	OAK 0315	Discussion

0102	Aaron Hood M 4:00pm - 5:15pm Tu 4:00pm - 5:30pm	Seats (Total: 9) TWS 0320 CCC 1115	Discussion
0103	Aaron Hood M 4:00pm - 5:15pm Tu 4:00pm - 5:30pm	Seats (Total: 9) TWS 0320 ANN 1108A	Discussion
0104	Aaron Hood M 4:00pm - 5:15pm Tu 4:30pm - 6:00pm	Seats (Total: 9) TWS 0320 SCC 7106	Discussion
0105	Aaron Hood M 4:00pm - 5:15pm W 3:30pm - 5:00pm	Seats (Total: 9) TWS 0320 OAK 0315	Discussion
0106	Aaron Hood M 4:00pm - 5:15pm W 4:00pm - 5:30pm	Seats (Total: 9) TWS 0320 CCC 1200	Discussion
0107	Aaron Hood M 4:00pm - 5:15pm W 4:30pm - 6:00pm	Seats (Total: 9) TWS 0320 ANN 1108A	Discussion
0108	Aaron Hood M 4:00pm - 5:15pm Th 3:30pm - 5:00pm	Seats (Total: 9) TWS 0320 OAK 0315	Discussion
0109	Aaron Hood M 4:00pm - 5:15pm Th 4:00pm - 5:30pm	Seats (Total: 9) TWS 0320 CCC 1115	Discussion
0201	Aaron Hood M 5:30pm - 6:45pm Tu 3:30pm - 5:00pm	Seats (Total: 10) TWS 0320 OAK 0315	Discussion
0202	Aaron Hood M 5:30pm - 6:45pm Tu 4:00pm - 5:30pm	Seats (Total: 10) TWS 0320 CCC 1115	Discussion

0203	Aaron Hood M 5:30pm - 6:45pm Tu 4:00pm - 5:30pm	Seats (Total: 10) TWS 0320 ANN 1108A	Discussion
0204	Aaron Hood M 5:30pm - 6:45pm Tu 4:30pm - 6:00pm	Seats (Total: 10) TWS 0320 SCC 7106	Discussion
0205	Aaron Hood M 5:30pm - 6:45pm W 3:30pm - 5:00pm	Seats (Total: 10) TWS 0320 OAK 0315	Discussion
0206	Aaron Hood M 5:30pm - 6:45pm W 4:00pm - 5:30pm	Seats (Total: 10) TWS 0320 CCC 1200	Discussion
0207	Aaron Hood M 5:30pm - 6:45pm W 4:30pm - 6:00pm	Seats (Total: 10) TWS 0320 ANN 1108A	Discussion
0208	Aaron Hood M 5:30pm - 6:45pm Th 3:30pm - 5:00pm	Seats (Total: 10) TWS 0320 OAK 0315	Discussion
0209	Aaron Hood M 5:30pm - 6:45pm Th 4:00pm - 5:30pm	Seats (Total: 10) TWS 0320 CCC 1115	Discussion
0301	Aaron Hood Contact instructor or department for details.	Seats (Total: 15)	

HESI489 **Field Experiences in Higher Education, Student Affairs, and International Education Policy**

Credits: 1-4 Grading Method: Regular, Pass-Fail, Audit

Planned field experience in education and community related activities. Credit not to be granted for experiences accrued prior to registration.

1501	Marsha Guenzler-Stevens Contact instructor or department for details.	Seats (Total: 10)	

7301	Kimberly Griffin	Seats (Total: 10)
	Contact instructor or department for details.	

HESI771 **The College Student**

Credits: 3 | Grading Method: Regular, Audit

Credit only granted for: EDCP771 or HESI771. Formerly: EDCP771.

A demographic study of the characteristics of college students as well as a study of their aspirations, values, and purposes.

0101	Candace Moore	Seats (Total: 20)
	W 9:30am - 12:30pm	EDU 2102

HESP Hearing and Speech Sciences Spring 2019

HESP120 **Introduction to Linguistics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS, DSSP

Additional information: HESP120 is required for HESP majors. HESP majors may not substitute LING200.

An introduction to the scientific study of natural language with focus on the basic concepts of phonology, syntax, semantics and pragmatics, with subsequent attention to the applied aspects of linguistic principles.

0101	Karen Mulak	Seats (Total: 45)
	TuTh 12:30pm - 1:45pm	ARC 1103
0201	Thomas Conners	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	ARC 1105

HESP202 **Introduction to Hearing and Speech Sciences**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

An introduction to communication sciences and disorders; a survey of th bases of normal speech, language and hearing ability, major forms of communicative disorders and their treatment.

0101	Kathleen Skinker	Seats (Total: 99)
	MWF 11:00am - 11:50am	TYD 0117

HESP214 **Should I Buy That?:Comparing Media Claims with Scientific Evidence from Brain & Behavior Research**

Credits: 3 | Grading Method: Regular | General Education: DSHS, SCIS

Millions of dollars are spent each year advertising products that "make you smarter" or "learn a foreign language faster" or "increase your memory", etc. But are these statements true? Can they be backed up? Learn how to critically evaluate media claims of new discoveries in brain and behavior. Read popular-press articles, listen to podcast episodes and review commercial products that claim to be based on science. Then, learn how to find out if the claims are true.

0101	Jared Novick	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	TYD 1101

HESP300 **Introduction to Psycholinguistics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP202; or permission of BSOS-Hearing & Speech Sciences department. Recommended: HESP120.

An introduction to current theories of language and an investigation of their relationship to human communication behavior. Survey of the experimental literature relating to this question.

0101	Yi Ting Huang	Seats (Total: 53)
	TuTh 9:30am - 10:45am	TYD 0102

HESP303 **Phonetic transcription**

Credits: 2 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of instructor.

An introduction to broad and narrow phonetic transcription, and to physiology of speech production. The primary goal of the course is to provide knowledge about phonetics and the ability to use this knowledge in an applied setting.

PBH1	Michele Walker	Seats (Total: 40)
	Tu 6:30pm - 8:10pm	ASY 3203
	Restricted to students in the Hearing and Speech Sciences In The Evening Program.	

HESP306 **Anatomy and Physiology of Speech & Hearing**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of instructor.

This is a 4-credit course focusing on the biological and neurological bases of human speech production and human hearing, namely the anatomy, physiology, and neurology of the vocal/speech mechanism and the hearing mechanism.Specifically, respiration, phonation, resonance, articulation, swallowing, and hearing will be highlighted. A strong understanding of normal anatomy and physiology is essential for the successful evaluation and treatment of patients with speech, language, swallowing and hearing disorders.

PBH1	Dawn Marsiglia, Donna Tippett	Seats (Total: 40)	
	Th 6:00pm - 8:30pm	ASY 3207	
	Class time/details on ELMs	ONLINE	Discussion
	Restricted to students in the Hearing and Speech Sciences In The Evening program.		

HESP311 **Anatomy, Pathology and Physiology of the Auditory System**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP202; or permission of BSOS-Hearing & Speech Sciences department.

Gross anatomy of the ear and pathways for transmission of sound energy through the peripheral and central auditory system. Causes, development and effects of pathological conditions contributing to temporary or chronic hearing impairments.

0101	Sandra Gordon-Salant	Seats (Total: 50)
	TuTh 2:00pm - 3:15pm	LEF 2166

HESP386 **Experiential Learning**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail

Restriction: Junior standing or higher; and permission of BSOS-Hearing & Speech Sciences department.

Students will have the opportunity observe and/or participate in therapy activities provided by a speech-language pathologist or audiologist in this experiential learning course.

Contact department for information to register for this course.

HESP388 **Undergraduate Research Externship**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Off-campus research internship with departmental affiliates at National Institutes of Health and regional universities. Contact department chairman for openings and descriptions of eligible placements.

Contact department for information to register for this course.

HESP389 LEAP Classroom Internship

Credits: 1-3 Grading Method: Regular

Participation in a language-based, literacy-rich preschool classroom fo children with speech-language disorders. Students will learn behavior management techniques, curriculum planning and implementation, facilitation of play among children, data collection and teaching srategies.

Contact department for information to register for this course.

HESP400 Speech and Language Development in Children

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP300; or permission of BSOS-Hearing & Speech Sciences department. Recommended: LING200 or HESP120. Restriction: Must be in Hearing and Speech Sciences program; or permission of BSOS-Hearing & Speech Sciences department.

Analysis of the normal processes of speech and language development in children.

0101	Kathleen Skinker TuTh 9:30am - 10:45am	Seats (Total: 35) SQH 1121

HESP402 Language and Phonological Disorders in Children

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP400; or permission of BSOS-Hearing & Speech Sciences department. Restriction: Must be in Hearing and Speech Sciences program.

Etiology, assessment and treatment of language and phonological disorders in children.

0101	Nan Ratner MW 2:00pm - 3:15pm	Seats (Total: 55) LEF 2166
PBH1	Karen Miranda Th 6:00pm - 8:30pm *Restricted to students in the Hearing and Speech Sciences In The Evenin program.*	Seats (Total: 25) ASY 3215

HESP403 **Introduction to Phonetic Science**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP305; or permission of BSOS-Hearing & Speech Sciences department. Restriction: Must be in Hearing and Speech Sciences program; or permission of BSOS-Hearing & Speech Sciences department.

An introduction to physiological, acoustic and perceptual phonetics; broad and narrow phonetic transcription; current models of speech production and perception.

0101	Margaritis Fourakis	Seats (Total: 46)
	TuTh 12:30pm - 1:45pm	ARC 1105

HESP407 **Bases of Hearing Science**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP311; or permission of BSOS-Hearing & Speech Sciences department. Restriction: Must be in Hearing and Speech Sciences program; or permission of BSOS-Hearing & Speech Sciences department.

Fundamentals of hearing, including the physics of sound, anatomy and physiology of peripheral and central auditory nervous system, psychophysical procedures used in measurement of auditory sensation and perception, and topics in psychological acoustics.

0101	Alessandro Presacco	Seats (Total: 50)
	TuTh 9:30am - 10:45am	TYD 1101

HESP411 **Introduction to Audiology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP311; or permission of BSOS-Hearing & Speech Sciences department. Restriction: Must be in Hearing and Speech Sciences program; or permission of BSOS-Hearing & Speech Sciences department.

An introduction to the field of audiology. Evaluation and remediation of hearing handicaps.

0101	Sarah Sohns	Seats (Total: 42)
	TuTh 11:00am - 12:15pm	ESJ 1309

HESP413 **Aural Rehabilitation/Habilitation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HESP411. Restriction: Sophomore standing or higher.

The fundamental aspects of aural rehabilitation therapy for both adults and children are introduced to students. Class time will consist of lectures, discussions, and hands-on activities.

0101	Eric Hoover	Seats (Total: 50)
	TuTh 11:00am - 12:15pm	VMH 1207

HESP415 **Principles and Methods in Speech-Language Pathology**

Credits: 2 Grading Method: Regular

Prerequisite: HESP400. Restriction: Must be in Hearing and Speech Sciences program.

The principles and methods required to provide treatment of speech and language disorders to children and adults. Topics include writing goals and objectives, programming,teaching strategies,session design, data collection, behavior modification and counseling.

0101	Eliza Thompson	Seats (Total: 35)
	M 10:00am - 11:40am	TYD 2110

HESP417 **Principles and Methods in Speech-Language Pathology and Audiology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HESP400 and HESP411; or permission of BSOS-Hearing & Speech Sciences department. Restriction: Must be in Hearing and Speech Sciences program; or permission of BSOS-Hearing & Speech Sciences department.

The principles underlying the treatment of speech, language and hearing disorders in children and adults.

PBH1	Kimberly Jenkins, Kristina Kubistal-Meeks	Seats (Total: 25)
	Tu 6:30pm - 9:00pm	ASY 3215
	Restricted to students in the Hearing and Speech Sciences In The Evening Program.	

HESP418A **Clinical Practice in Speech-Language Pathology and Audiology; Audiology Option**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Supervised observation with some direct participation in clinical methods for the treatment of disorders of articulation, fluency, child and adult language; evaluation and habilitation/rehabilitation of hearing impaired children and adults.

For majors only.

0101	Lisa Rickard	Seats (Total: 10)
	W 12:00pm - 12:50pm Contact instructor or department for details.	LEF 0111D

HESP418B **Clinical Practice in Speech-Language Pathology and Audiology; Speech Pathology Option**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Supervised observation with some direct participation in clinical methods for the treatment of disorders of articulation, fluency, child and adult language; evaluation and habilitation/rehabilitation of hearing impaired children and adults.

For majors only.

0101	Colleen Worthington	Seats (Total: 10)
	Contact instructor or department for details. Contact instructor or department for details.	

HESP469 **Honor Thesis Research**

Credits: 1-3 Grading Method: Regular

Student will develop thesis proposal, conduct research, analyze results develop and defend final written document.

Contact department for information to register for this course.

HESP469A **Honor Thesis Research**

Credits: 1-3 Grading Method: Regular

Student will develop thesis proposal, conduct research, analyze results develop and defend final written document.

Contact department for information to register for this course.

HESP469B **Honor Thesis Research**

Credits: 1-3 Grading Method: Regular

Student will develop thesis proposal, conduct research, analyze results develop and defend final written document.

Contact department for information to register for this course.

HESP498 **Seminar**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics in human communication and its disorders.

Contact department for information to register for this course.

HESP498C **Seminar; Cochlear Implants**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Selected topics in human communication and its disorders.

0101	Nicole Nguyen	Seats (Total: 20)
	Tu 2:00pm - 4:30pm	LEF 1201

HESP499 **Independent Study; Topics in the Hearing and Speech Sciences**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

A directed study of selected topics pertaining to human communication and its disorders.

Contact department for information to register for this course.

HESP499H **Independent Study**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

A directed study of selected topics pertaining to human communication and its disorders.

Contact department for information to register for this course.

HESP601 **Foundations of Scientific Inquiry**

Credits: 1 Grading Method: Regular

Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; or permission of Instructor. Additional information: Course meets over three semesters for the duration of the Masters of Speech-Language Pathology program.

Overview of methods of empirical research used in Communication Sciences and Disorders. The course will focus on identifying, critically analyzing, and writing about empirical research.

0101	Jan Edwards	Seats (Total: 25)
	Contact instructor or department for details.	

HESP602 **Advanced Seminar in Neurological Bases of Communication**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: An undergraduate course in human neuroanatomy. Restriction: Permission of BSOS-Hearing & Speech Sciences department.

An advanced discussion of the neural bases of human communication and its disorders, neuroimaging, neural plasticity and neurological evaluations, with emphasis on current developments and critical analysis.

0101	Yasmeen Shah	Seats (Total: 30)
	Th 9:00am - 10:40am	LEF 0135

HESP603 **Seminar in Cultural and Linguistic Diversity in Communication Disorders**

Credits: 1 Grading Method: Regular

Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; or permission of Instructor. Additional information: Course meets over four semesters for the duration of the Masters of Speech-Language Pathology program.

Overview of cultural and linguistic diversity (CLD) in general, and the impact of CLD on communication, communication disorders, and the professional practice of Speech-Language Pathology

0101	Eusabia Mont	Seats (Total: 25)
	F 1:00pm - 2:30pm	LEF 0135

HESP611 **Cognitive Disorders in Adults**

Credits: 2 Grading Method: Regular, Audit

Prerequisite: Must have completed or be concurrently enrolled in HESP610; and must have knowledge of basic human neuroanatomy. Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; or permission of instructor.

Etiology, diagnosis and management of cognitive problems of adults associated with aging, brain injury and degenerative conditions.

0101	Yasmeen Shah	Seats (Total: 34)
	Meets March 18, 2019 - May 14, 2019	
	Tu 9:30am - 12:50pm	LEF 0135

HESP612 **Fluency Disorders**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

The nature of fluency disorders. Principles, methods and procedures for the clinical management of fluency disorders in children and adults.

0101	Vivian Sisskin	Seats (Total: 34)
	Meets January 28, 2019 - March 16, 2019	
	Tu 9:30am - 12:50pm	LEF 0135

HESP620 **Speech Production Disorders Across the Lifespan**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; or permission of instructor.

Assessment and treatment of phonological, articulatory and resonance disorders arising from various etiologies including developmental conditions, structural abnormalities, and nervous system damage.

0101	Kristin Slawson, Jan Edwards	Seats (Total: 34)
	Tu 2:00pm - 4:30pm	LEF 0135

HESP632 **Medical Audiology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: HESP311. Corequisite: HESP606.

Overview of auditory pathologies, and their assessment and management in the medical setting.

0101	Carmen Brewer, Kelly King	Seats (Total: 30)
	M 5:30pm - 8:00pm	LEF 0135

HESP638 **Research Practicum**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Analysis, synthesis and integration of knowledge related to current research or clinical issues in human communication and its related disorders.

Contact department for information to register for this course.

HESP639C **Special Topics in Hearing and Speech Sciences; Cochlear Implants**

Credits: 3 Grading Method: Regular, Audit

Intensive coverage of selected topics of current interest.

0101	Nicole Nguyen	Seats (Total: 10)
	Tu 2:00pm - 4:30pm	LEF 1201

HESP639P **Special Topics in Hearing and Speech Sciences; Seminar in Interprofessional Collaborative Practice**

Credits: 2 Grading Method: Regular, Audit

Intensive coverage of selected topics of current interest.

Topics include: a case study in interprofessional collaboration and decision making, professional identity (SLP, Audiology, PT, OT, Social Work, Psychologist, etc), and teamwork dynamics. Format is blended. Attendance in IPE day at the Universoty of MD Baltimore is required, Date TBA.

0101	Yasmeen Shah	Seats (Total: 20)
	Tu 5:00pm - 7:30pm	LEF 0104A
	Attendance in IPE Day at the University of Maryland, Baltimore is required (April 4, 2018, noon to 5 pm)	

HESP648B **Clinical Practice in Speech; Therapeutic Procedures**

(Perm req)

Credits: 1-2 Grading Method: Regular

Supervised training in the application of clinical methods in the diagnosis and treatment of speech disorders.

2101	Vivian Sisskin	Seats (Total: 5)
	Contact instructor or department for details.	

2301	Eliza Thompson	Seats (Total: 5)	
	TBA	LEF 0135	Lab
2701	Jose Ortiz	Seats (Total: 5)	
	M 9:30am - 11:50am	LEF 0135	Lab
	Th 12:30pm - 1:30pm	LEF 0135	Lab
	F 11:00am - 11:50am	LEF 0135	Lab
	W 10:00am - 10:50am	Location: TBA	Lab
2801	Eusabia Mont	Seats (Total: 5)	
	Contact instructor or department for details.		
3601	Kristin Slawson	Seats (Total: 5)	
	Contact instructor or department for details.		
3701	Kathryn Dow-Burger	Seats (Total: 5)	
	Contact instructor or department for details.		

HESP649A **Clinical Practice in Audiology; Diagnostic Audiology**

(Perm req)

Credits: 1-2 Grading Method: Regular

Supervised training in the application of clinical methods in the diagnosis and treatment of hearing disorders.

Contact department for information to register for this course.

HESP649B **Clinical Practice in Audiology; Aural Rehabilitation**

(Perm req)

Credits: 1-2 Grading Method: Regular

Supervised training in the application of clinical methods in the diagnosis and treatment of hearing disorders.

Contact department for information to register for this course.

HESP701 **Hearing Aids II**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: HESP700. Restriction: Must be in one of the following programs (Hearing and Speech Sciences: Ph.D. (Doctoral); Clinical Audiology: Au.D. or Ph.D. (Doctoral); Hearing and Speech Sciences: M.A. (Master's)) ; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Advanced issues in amplification technology, prescriptive hearing aid selection, and management of amplification systems for special populations.

0101	Eric Hoover	Seats (Total: 10)
	Tu 3:30pm - 6:00pm	LEF 1221

HESP702 **Diagnostic Procedures in Speech-Language Pathology**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Diagnostic tools and methods in the analysis of speech-language disorders in children and adults.

0101	Instructor: TBA	Seats (Total: 20)
	Meets January 28, 2019 - March 26, 2019	
	Tu 9:30am - 12:50pm	TWS 1320

HESP706 **Advanced Clinical Audiology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: HESP606; or students who have taken courses with comparable content may contact the department.

Advanced clinical and experimental methods of evaluating the peripheral and central auditory system using acoustic stimuli. Procedural considerations and interpretation of test results.

0101	Samira Anderson	Seats (Total: 20)
	W 3:30pm - 6:00pm	LEF 0135

HESP708 **Independent Study**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Individual research projects under guidance of a faculty member.

Contact department for information to register for this course.

HESP724 **Research Design**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed a course in basic statistics.

Evaluations of research designs, critique of published articles and student involvement in designing experiments on assigned topics.

0101	Yi Ting Huang M 1:00pm - 3:30pm	Seats (Total: 10) LEF 0135

HESP728 **Advanced Clinical Practice in Speech; Advanced Graduate Laboratory Practicum in Speech-Language Pathology**

(Perm req)

Credits: 1-8 Grading Method: Regular

Clinical internship in selected off-campus facilities.

Contact department for information to register for this course.

HESP729 **Advanced Clinical Practice in Audiology; Advanced Graduate Laboratory Practicum in Audiology**

(Perm req)

Credits: 1-8 Grading Method: Regular

Clinical internship in selected off-campus facilities.

1301	Instructor: TBA Contact instructor or department for details. Contact instructor or department for details.	Seats (Total: 10)
3201	Nicole Nguyen Contact instructor or department for details.	Seats (Total: 25)

HESP730 **Vestibular-ocular Assessment and Management (Electrophysiologic Measures II)**

Credits: 3 Grading Method: Regular

Prerequisite: HESP630.

Advanced principles and methods of evaluating vestibular-ocular functio using electrophysiologic measures. Includes rehabilitative issues pertaining to balance disorders and advanced electrophysiologic measures of auditory system function.

0101	Christopher Zalewski Tu 5:00pm - 7:30pm	Seats (Total: 20) LEF 0135

HESP788 **Graduate Research Externship**

Credits: 1-3 Grading Method: Regular, Audit

Off-campus research internship with departmental affiliates at National Institutes of Health and other regional universities. Contact department chairman for available placements, requirements and openings.

Contact department for information to register for this course.

HESP799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

HESP818C Seminar in Language Processing

Credits: 3 Grading Method: Regular, Audit

Information processing models of language, relationships among language memory and cognition.

0101	Jared Novick W 1:30pm - 4:15pm	Seats (Total: 20) LEF 1220

HESP829 Clinical Internship Residency

Credits: 1-9 Grading Method: Regular, Audit

Off-Campus, full-time (30-40 hours/week) clinical externship in Audiology at regional and national institutions.

1301	Instructor: TBA Contact instructor or department for details.	Seats (Total: 30)
3201	Nicole Nguyen Contact instructor or department for details.	Seats (Total: 5)

HESP849 Capstone Research Project I

Credits: 2 Grading Method: Regular

First of two-course sequence leading to the final research requirement for the Doctor of Audiology (Au.D.) degree; involves individual study and/or supervised lab work with mentor, preparation of research proposal (including IRB protocol if required), and attendance at Capstone Research Project Workshop.

Contact department for information to register for this course.

HESP859 **Capstone Research Project II**

Credits: 1-2 Grading Method: Regular

Second of two-course sequence leading to the final research requirement for the Doctor of Audiology (Au.D.) degree; involves final data collection, analysis and presentation of results or completion of scholarly paper under the direction of the faculty mentor.

Contact department for information to register for this course.

HESP889 **Doctoral Candidacy Research**

Credits: 1-3 Grading Method: Regular

Doctoral candidacy paper research

Contact department for information to register for this course.

HESP898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

HESP899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

HHUM Honors Humanities Spring 2019

HHUM106 **Honors Humanities: The Humanities in Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA General Education: DSHU, DSSP

Recommended: HHUM105. Restriction: Must be in the Honors Humanities Program. Additional information: Priority enrollment will be given to students in Honors Humanities.

The application of the disciplines, methods and traditions of the Humanities to contemporary problems and issues such as social injustice, immigration, income inequality, and the role of social media. Students will apply to such issues the tools of the Humanities: research and historical analysis, critical reasoning, communication and persuasion, ethical debate, and imagination. The course will utilize the institutions of Washington, D.C. to explore contemporary problems and will guide students in the creation of their individual proposals for the capstone project that is the culmination of the curriculum in Honors Humanities.

0101	Yvonne Slosarski	Seats (Total: 17)	
	Tu 3:30pm - 4:45pm	ESJ 0215	
	Th 3:30pm - 4:45pm	TWS 1105	Discussion

0102	Yvonne Slosarski Tu 3:30pm - 4:45pm Th 3:30pm - 4:45pm	Seats (Total: 17) ESJ 0215 JMZ 3120	Discussion
0103	Yvonne Slosarski Tu 3:30pm - 4:45pm Th 2:00pm - 3:15pm	Seats (Total: 17) ESJ 0215 PLS 1146	Discussion
0104	Yvonne Slosarski Tu 3:30pm - 4:45pm Th 12:30pm - 1:45pm	Seats (Total: 17) ESJ 0215 ANA 0120	Discussion

HHUM206 **Honors Humanities Research Semester**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Design, execution and completion of students' chosen Keystone Projects in the form of research, creativity, or service. Students will have formulated tentative plans for their projects in HHUM106; in this course they will revise and augment those proposals, articulate their connections with the traditions and methods of the humanities, formulate a work plan for completing the project within one semester, and work with their fellow students to workshop their materials as they develop. The course will culminate in a presentation of the project at the annual Keystone Symposium and with the submission of the project in its final form.

0101	Yvonne Slosarski W 3:00pm - 3:50pm	Seats (Total: 10) ANA 0103	
0102	Yvonne Slosarski W 4:00pm - 4:50pm	Seats (Total: 10) ANA 0103	
0103	Gregory Staley Th 4:00pm - 4:50pm	Seats (Total: 10) ANA 0103	
0105	Sabrina Gonzalez Th 11:00am - 11:50am	Seats (Total: 10) ANA 0103	
0106	Kathleen Brown Tu 3:00pm - 3:50pm	Seats (Total: 10) ANA 0103	

HHUM328 **Internship in Honors Humanities**

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Supervised service-learning in Honors Humanities.

0101	Yvonne Slosarski	Seats (Total: 20)
	Contact instructor or department for details.	

HHUM329 **Undergraduate Teaching Assistantship**

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Supervised pedagogical service-learning in the Honors Humanities curriculum.

0101	Yvonne Slosarski	Seats (Total: 5)
	Contact instructor or department for details.	

HISP Historic Preservation Spring 2019

HISP200 **The Everyday and the American Environment**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO, D | General Education: DSHU, DVUP, SCIS

Also offered as: HISP615.

An introduction to the theories of the everyday within the context of the American built environment. Focuses primarily on the American experience of underrepresented, minority, and/or immigrant communities; both historical and contemporary. Attempts to challenge what is meant by American in describing the American everyday built environment.

0101	Jeremy Wells	Seats (Total: 19)	
	Th 3:30pm - 4:45pm Tu 12:30pm - 1:45pm	ASY 2203 ARC 1125	Discussion
0102	Jeremy Wells	Seats (Total: 24)	
	Th 3:30pm - 4:45pm Tu 12:30pm - 1:45pm	ASY 2203 JMZ 0120	Discussion
0103	Jeremy Wells	Seats (Total: 24)	
	Th 3:30pm - 4:45pm Tu 2:00pm - 3:15pm	ASY 2203 ASY 3219	Discussion

0104	Jeremy Wells Th 3:30pm - 4:45pm Tu 2:00pm - 3:15pm	Seats (Total: 24) ASY 2203 JMZ 1120	 Discussion
0105	Jeremy Wells Th 3:30pm - 4:45pm Tu 2:00pm - 3:15pm	Seats (Total: 19) ASY 2203 ARC 1125	 Discussion

HISP619B **Special Topics in Historic Preservation; Digital Heritage Preservation**

Credits: 4 Grading Method: Regular, Audit

Technical aspects of preservation taught by practitioners whose expertise are of special benefit to certificate students.

Also offered as ANTH634. Credit only granted for ANTH634, HISP619B, or ANTH434.

0101	Stefan Woehlke, Mark Leone TuTh 2:00pm - 3:45pm	Seats (Total: 10) ARC 1115

HISP619L **Special Topics in Historic Preservation; Vernacular Architecture Lab**

Credits: 1-6 Grading Method: Regular, Audit

Technical aspects of preservation taught by practitioners whose expertise are of special benefit to certificate students.

0101	Dennis Pogue Contact instructor or department for details.	Seats (Total: 10)

HISP619M **Special Topics in Historic Preservation; Management and Practice**

Credits: 2 Grading Method: Regular, Audit

Technical aspects of preservation taught by practitioners whose expertise are of special benefit to certificate students.

0101	Constance Ramirez Contact instructor or department for details.	Seats (Total: 15)

HISP629 **Independent Studies in Historic Preservation**

Credits: 1-3

Grading Method: Regular, Audit

Individual Instruction course.

0101	Dennis Pogue	Seats (Total: 5)
	Contact instructor or department for details.	

HISP630 **Preservation Policy and Planning**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Credit only granted for: HISP619M or HISP630. Formerly: HISP619M.

An opportunity is provided to look in depth at the national historic preservation program that is the federal, tribal, state, and local (city and county) public sector preservation activities being undertaken in accordance with public policy set by laws, regulations, standards, and guidelines.

0101	Constance Ramirez, John Sprinkle	Seats (Total: 15)
	Tu 7:00pm - 9:40pm	ARC 1117

HISP635 **Social and Ethnic Issues in Historic Preservation Practice**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Credit only granted for: HISP628E or HISP635. Formerly: HISP628E.

This seminar course examines the broader social and ethnic dimensions o historic preservation practice that have impacted the field since the "culture wars" of the 1990's. Through weekly case studies of local, international sites, students will explore these issues and apply newly emerging methodologies to their final case study project.

0101	Jeremy Wells	Seats (Total: 10)
	W 1:00pm - 3:40pm	ARC 1117

HISP640 **Historic Preservation Law, Advocacy and Public Policy**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Credit only granted for: HISP619C or HISP640. Formerly: HISP619C.

Introduce students to legal, advocacy, and public policy issues in the field of historic preservation. Student activities will be designed to teach basic working knowledge of relevant legal subjects, including historic preservation ordinances, state and federal preservation statutes, and important constitutional issues.

0101	Frederick Stachura	Seats (Total: 15)
	M 7:00pm - 9:40pm	ARC 1125

HISP645 **Archaeology and Preservation**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Credit only granted for: HISP619A or HISP645. Formerly: HISP619A.

An introduction to issues related to archaeological resources and preservation. Topics will include method and theory in American archaeology, archaeology in support of architectural history, archaeology and the NHPA, archaeological site preservation and conservation, and curation and collections management. Students will have a chance to work at an archaeological site to experience field excavation techniques and challenges, and will visit other archaeological sites and curation facilities in the area.

0101	Donald Linebaugh	Seats (Total: 15)
	Tu 4:00pm - 6:40pm	Location: TBA

HISP660 **Internship in Historic Preservation**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Formerly: HISP619.

Students will secure a summer internship with an organization engaged in historic preservation work (this can be a public agency, nonprofit, or private firm). The students will formulate a plan of work and a series of pedagogical goals to satisfy both the practical needs of the project and the academic requirements for the course.

0101	Dennis Pogue	Seats (Total: 15)
	Contact instructor or department for details.	

HISP670 **Conservation of Historic Places: Historic Materials, Building Systems, and Conservation**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Credit only granted for: HISP619T or HISP670. Formerly: HISP619T.

Introduces students to the analysis of historic buildings, building systems and materials. The overall emphasis is on assessing the condition of a building and its parts, and formulating a preservation strategy based on it. Conservation methods will be discussed through the introduction of philosophies and specific techniques.

0101	Dennis Pogue	Seats (Total: 15)
	W 7:00pm - 9:40pm	ARC 1117

HISP701 **Certificate Portfolio Project**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Prerequisite: Permission of ARCH-Historic Preservation Program.

Students will gather samples of their work and craft a synthetic statement on their experiences in their HISP certificate courses (for example, picking up on themes such as community involvement, diversity of practice, affordable housing, or sustainability), and the ways in which they have integrated historic preservation into their thinking and practice in their home discipline.

0101	Dennis Pogue	Seats (Total: 5)
	Contact instructor or department for details.	

HISP710 **Final Project in Historic Preservation I**

Credits: 1 Grading Method: Regular, Audit

Credit only granted for: HISP700 or HISP710. Formerly: HISP700.

An independent, applied research project investigating the preservation of a particular site or a specialized issue in historic preservation. This is part one of a two-semester sequence and involves developing the project proposal and bibliography.

0101	Dennis Pogue	Seats (Total: 15)
	Contact instructor or department for details.	

HISP711 **Final Project in Historic Preservation II**

Credits: 2 Grading Method: Regular, Audit

Credit only granted for: HISP700 or HISP711. Formerly: HISP700.

An independent, applied research project invesitgating the preservation of a particular site or a specialized issue in historic preservation. This is part two of a two semester sequence and involves project research and writing.

0101	Dennis Pogue Contact instructor or department for details.	Seats (Total: 15)

HIST History Spring 2019

HIST110 **The Ancient World**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU

Interpretation of select literature and art of the ancient Mediterranean world with a view to illuminating the antecedents of modern culture; religion and myth in the ancient Near East; Greek philosophical, scientific, and literary invention; and the Roman tradition in politics and administration.

0101	Arthur Eckstein MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) KEY 0106 KEY 0100	 Discussion
0102	Arthur Eckstein MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 20) KEY 0106 KEY 0100	 Discussion
0103	Arthur Eckstein MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 20) KEY 0106 KEY 0100	 Discussion
0104	Arthur Eckstein MW 10:00am - 10:50am F 2:00pm - 2:50pm	Seats (Total: 20) KEY 0106 KEY 0100	 Discussion

HIST111 **The Medieval World**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS, DVUP

The development of Europe in the Middle Ages; the role of religious values in shaping new social, economic, and political institutions; medieval literature, art and architecture.

0101	Colleen Ho TuTh 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 20) SYM 0200 KEY 0117	 Discussion

0102	Colleen Ho TuTh 11:00am - 11:50am Th 2:00pm - 2:50pm	Seats (Total: 20) SYM 0200 KEY 0117	Discussion
0103	Colleen Ho TuTh 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 20) SYM 0200 TLF 1101	Discussion
0104	Colleen Ho TuTh 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 20) SYM 0200 TLF 1101	Discussion

HIST142 **Looking at America through a Global Lens**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS, SCIS

Credit only granted for: HIST289I or HIST142. Formerly: HIST289I.

Looking at America will focus on a thematic approach to the study of foreign -- negative and positive -- perceptions of America in the 20th century.

0101	Saverio Giovacchini MW 1:00pm - 1:50pm W 2:00pm - 2:50pm	Seats (Total: 20) KEY 0106 KEY 0117	Discussion
0102	Saverio Giovacchini MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 20) KEY 0106 KEY 0117	Discussion
0103	Saverio Giovacchini MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 20) KEY 0106 KEY 0117	Discussion
0104	Saverio Giovacchini MW 1:00pm - 1:50pm F 2:00pm - 2:50pm	Seats (Total: 20) KEY 0106 KEY 0117	Discussion

HIST189B **Topics in History; Sustainability and History: The Maryland Experience**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Thematic exploration of a topic in history at an introductory level with emphasis on understanding what historians do and how history is relevant in the contemporary world.

Also offered as ENST140. Credit only granted for HIST189B or ENST140. Examines the changing nature of concern over sustainability through the environmental history of the state of Maryland. The historical approach, supplemented by discussion of the basic scientific processes underlying ecosystem functions and human impacts on the environment, reveals both enduring and changing qualities of the search for sustainable patterns of living, beginning before 17th century European contact and continuingon into the environmental concerns of our own time.

0101	Robert Friedel MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 20) ESJ 0215 KEY 0126	Discussion
0102	Robert Friedel MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 20) ESJ 0215 KEY 0126	Discussion
0103	Robert Friedel MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 19) ESJ 0215 KEY 0126	Discussion
0104	Robert Friedel MW 1:00pm - 1:50pm F 2:00pm - 2:50pm	Seats (Total: 19) ESJ 0215 KEY 0126	Discussion

HIST200 **Interpreting American History: Beginnings to 1877**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS, DSHU

Credit only granted for: HIST156 or HIST200. Formerly: HIST156.

The United States from colonial times to the end of the Civil War. Establishment and development of American institutions.

0101	Holly Brewer TuTh 9:30am - 10:20am F 9:00am - 9:50am	Seats (Total: 20) KEY 0106 TLF 1101	Discussion
0102	Holly Brewer TuTh 9:30am - 10:20am F 10:00am - 10:50am	Seats (Total: 20) KEY 0106 TLF 1101	Discussion

0103	Holly Brewer TuTh 9:30am - 10:20am F 12:00pm - 12:50pm	Seats (Total: 20) KEY 0106 KEY 0117	Discussion
0104	Holly Brewer TuTh 9:30am - 10:20am F 1:00pm - 1:50pm	Seats (Total: 20) KEY 0106 KEY 0117	Discussion

HIST201 **Interpreting American History: From 1865 to the Present**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SH	General Education: DSHS, DSHU, DVUP

Credit only granted for: HIST157 or HIST201. Formerly: HIST157.

The United States from the end of the Civil War to the present. Economic, social, intellectual, and political developments. Rise of industry and emergence of the United States as a world power.

0101	Jeffrey Coster MW 12:00pm - 12:50pm M 1:00pm - 1:50pm	Seats (Total: 20) KEY 0106 KEY 0100	Discussion
0102	Jeffrey Coster MW 12:00pm - 12:50pm M 2:00pm - 2:50pm	Seats (Total: 20) KEY 0106 KEY 1117	Discussion
0103	Jeffrey Coster MW 12:00pm - 12:50pm Tu 9:30am - 10:20am	Seats (Total: 20) KEY 0106 KEY 0117	Discussion
0104	Jeffrey Coster MW 12:00pm - 12:50pm Tu 11:00am - 11:50am	Seats (Total: 20) KEY 0106 KEY 0117	Discussion
0105	Jeffrey Coster MW 12:00pm - 12:50pm Tu 12:30pm - 1:20pm	Seats (Total: 20) KEY 0106 KEY 0117	Discussion
0106	Jeffrey Coster MW 12:00pm - 12:50pm Tu 2:00pm - 2:50pm	Seats (Total: 20) KEY 0106 KEY 0117	Discussion

0107	Jeffrey Coster MW 12:00pm - 12:50pm W 9:00am - 9:50am	Seats (Total: 20) KEY 0106 TLF 1101	Discussion
0108	Jeffrey Coster MW 12:00pm - 12:50pm W 10:00am - 10:50am	Seats (Total: 20) KEY 0106 TLF 1101	Discussion
0109	Jeffrey Coster MW 12:00pm - 12:50pm W 11:00am - 11:50am	Seats (Total: 20) KEY 0106 TLF 1101	Discussion
0110	Jeffrey Coster MW 12:00pm - 12:50pm W 1:00pm - 1:50pm	Seats (Total: 20) KEY 0106 TLF 1101	Discussion
0111	Jeffrey Coster MW 12:00pm - 12:50pm Th 9:30am - 10:20am	Seats (Total: 20) KEY 0106 KEY 0117	Discussion
0112	Jeffrey Coster MW 12:00pm - 12:50pm Th 11:00am - 11:50am	Seats (Total: 20) KEY 0106 KEY 0117	Discussion
0201	Robert Chiles TuTh 12:30pm - 1:20pm Th 9:30am - 10:20am	Seats (Total: 20) KEY 0106 TLF 1103	Discussion
0202	Robert Chiles TuTh 12:30pm - 1:20pm Th 11:00am - 11:50am	Seats (Total: 20) KEY 0106 KEY 0124	Discussion
0203	Robert Chiles TuTh 12:30pm - 1:20pm F 9:00am - 9:50am	Seats (Total: 20) KEY 0106 TLF 1103	Discussion
0204	Robert Chiles TuTh 12:30pm - 1:20pm F 10:00am - 10:50am	Seats (Total: 20) KEY 0106 TLF 1103	Discussion

0205	Robert Chiles TuTh 12:30pm - 1:20pm F 11:00am - 11:50am	Seats (Total: 20) KEY 0106 TLF 1103	Discussion
0206	Robert Chiles TuTh 12:30pm - 1:20pm F 12:00pm - 12:50pm	Seats (Total: 20) KEY 0106 TLF 1103	Discussion
0207	Robert Chiles TuTh 12:30pm - 1:20pm F 1:00pm - 1:50pm	Seats (Total: 20) KEY 0106 TLF 1103	Discussion
0208	Robert Chiles TuTh 12:30pm - 1:20pm F 2:00pm - 2:50pm	Seats (Total: 20) KEY 0106 TLF 1103	Discussion

HIST204 **Introduction to the History of Science**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS

Credit only granted for: HIST174 or HIST204. Formerly: HIST174.

An exploration of the roots of modern science from the ancient Greeks through the medieval and early modern periods. Focus on the men and women who helped to create the sciences and to change public perceptions of their disciplines.

0101	Gabriel Henderson TuTh 9:30am - 10:45am	Seats (Total: 40) KEY 0126

HIST208T **Historical Research and Methods Seminar; Self and Others: Autobiography, Biography, and Life-Writing in Medieval and Early Modern Worlds**

(Perm req)

Credits: 3 | Grading Method: Regular

Reading and research skills and methods. Research papers will be based on the topic of the seminar.

0101	Jonathan Allen Tu 11:00am - 12:50pm Contact instructor or department for details.	Seats (Total: 12) KEY 0107
0201	Jonathan Allen Tu 2:00pm - 3:50pm Contact instructor or department for details.	Seats (Total: 12) KEY 0107

HIST208V **Historical Research and Methods Seminar; Race and Gender in the Civil War Era**

(Perm req)

Credits: 3 Grading Method: Regular

Reading and research skills and methods. Research papers will be based on the topic of the seminar.

0101	Stanley Maxson W 10:00am - 11:50am Contact instructor or department for details.	Seats (Total: 12) WDS 1127
0201	Stanley Maxson W 1:00pm - 2:50pm Contact instructor or department for details.	Seats (Total: 12) KEY 0120

HIST208W **Historical Research and Methods Seminar; War, Culture, and Legitimacy in the Ancient World**

(Perm req)

Credits: 3 Grading Method: Regular

Reading and research skills and methods. Research papers will be based on the topic of the seminar.

0101	Jordan Slavik Th 11:00am - 12:50pm Contact instructor or department for details.	Seats (Total: 12) KEY 0107
0201	Jordan Slavik Th 2:00pm - 3:50pm Contact instructor or department for details.	Seats (Total: 12) KEY 0107

HIST211 **Love, Labor, and Citizenship: History of American Women Since 1880**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS, DVUP

Also offered as: WMST211. Credit only granted for: HIST211 or WMST211.

An examination of women's changing roles in working class and middle class families, the effects of industrialization on women's economic activities and status, and women's involvement in political and social struggles including those for women's rights, birth control, and civil rights.

0101	Katarina Keane TuTh 11:00am - 11:50am W 10:00am - 10:50am	Seats (Total: 20) KEY 0106 KEY 0100	 Discussion

0102	Katarina Keane TuTh 11:00am - 11:50am W 11:00am - 11:50am	Seats (Total: 20) KEY 0106 KEY 0100	Discussion
0103	Katarina Keane TuTh 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 20) KEY 0106 KEY 0100	Discussion
0104	Katarina Keane TuTh 11:00am - 11:50am W 2:00pm - 2:50pm	Seats (Total: 20) KEY 0106 KEY 0123	Discussion

HIST219C **Special Topics in History; New Explorations in Jewish Studies: Can Jews be Arabs? Identity and Crisis for the Jews of Arab Lands in Modern Times**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP

Also offered as JWST289A. Credit only granted for JWST289A or HIST219C Examines the complex and fraught history of the Jews of Arab lands in modern times, with a focus on questions of identity, relationship with Christian and Muslim Arabs, and the impact of Zionism and Arab nationalism.

0101	Shay Hazkani TuTh 11:00am - 12:15pm	Seats (Total: 30) HJP 2114

HIST219K **Special Topics in History; London and British Empire**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

HIST221 **Asian American History**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D

Also offered as: AAST201. Credit only granted for: AAST201 or HIST221.

Introduction to the history of Asian Americans in the United States and the Americas and to the field of Asian American Studies, from an interdisciplinary perspective. Topics include theories of race and ethnicity; Asian migration and diaspora to the Americas; Asian American work and labor issues; gender, family, and communities; nationalism and nativism, and anti-Asian movements; Asian Americans in World War II, the Cold War, and the issues in the civil rights & post-civil rights era.

0101	Terry Park	Seats (Total: 60)
	TuTh 11:00am - 12:15pm	SQH 1119

HIST222 **Immigration and Ethnicity in America**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SH, D	General Education: DSHS, DVUP

Also offered as: AAST222. Credit only granted for: AAST222, AAST298A, HIST219L, or HIST222. Formerly: HIST219L.

The history of immigration and the development of diverse populations i the United States are examined. Topics include related political controversies, the social experiences of immigrants, ethnicity, generations, migration, inter-group relations, race, and diversity in American culture.

0101	Robert Chiles	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	KEY 0103

HIST225 **Modern Military History, 1815-Present**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SH	General Education: DSHS

The military history of Europe through an examination of the economic, financial, strategic, tactical, and technological aspects of the development of military institutions and warfare from the Congress of Vienna in 1815 to the present.

0101	Patrick Chung	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	KEY 0103

HIST233 **Empire! The British Imperial Experience 1558-1997**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SH, D	General Education: DSHS, DVUP

Credit only granted for: HIST219P or HIST233. Formerly: HIST219P.

Britain's empire from the mid-sixteenth century to the late twentieth century, focusing on the encounter between Britain and indigenous peoples. Topics include the origins of British imperialism in Ireland and North America, the slave trade, the East India Company and India, women in empire, transportation and the making of Australia, sex in empire, missionaries, racial theories, and decolonization.

0101	Anne Rush	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	KEY 0126

HIST235 **History of Britain 1461 to 1714**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS

British history from the War of the Roses to the Hanoverian succession; Yorkist and Tudor society and politics; the Renaissance and Reformation in England, Henry VIII through Elizabeth I; 17th-century crises and revolutions; intellectual and cultural changes; the beginnings of empire; the achievement of political and intellectual order.

0101	Sabrina Baron	Seats (Total: 30)
	TuTh 9:30am - 10:45am	KEY 0100

HIST236 **From Peacocks to Punks: Modern Britain from 1688 to Today**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS

British history from the Glorious Revolution of 1688 to the present. The revolution of 1688; the structure of 18th-century society and politics; economic and social change in the Industrial Revolution; 19th- and 20th-century political and social reform; imperialism; the impact of the First and Second World Wars on British society.

0101	Julie Taddeo	Seats (Total: 40)
	MW 2:00pm - 3:15pm	HBK 0109

HIST237 **Russian Civilization**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH, D | General Education: DSHS

An overview of Russian history stressing the main lines of development of the Russian state and the evolution of Russian culture to the present day.

0101	Mikhail Dolbilov	Seats (Total: 40)
	TuTh 9:30am - 10:45am	SQH 1101

HIST245 **Reformers, Radicals, and Revolutionaries: The Middle East in the Twentieth Century**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS

Credit only granted for: HIST219W or HIST245. Formerly: HIST219W.

The 20th century was a period of dramatic changes in the Middle East. Within the global context of the two World Wars and the Cold War, countries in the region struggled with the effects of colonialism and painful processes of decolonization. The course offers a thematic-comparative approach to issues such as social and political reform, nationalism, the colonial experience, independence struggles, models of governance, political violence, and Islamism. Course lectures and the analysis and discussion of primary sources will lead students to understand that the peoples of the Middle East found answers to the challenges posed by Western dominance based on their specific historical, cultural and socio-economic circumstances.

For Spring 2019; Also offered as ARAB298K and RELS219K. Credit granted for HIST245, ARAB298K, or RELS219K.

0101	Shay Hazkani	Seats (Total: 40)
	MW 2:00pm - 3:15pm	SQH 1117

HIST251 **Latin America Since Independence**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SH, D	General Education: DSHS, DVUP

Also offered as: HIST251. Credit only granted for: HIST251 or LASC251.

Introductory survey of the history of Latin America from the era of independence (c. 1810-1825) through the early 1980s. Major themes include independence and sovereignty, postcolonialism and neocolonialism, nation- and state-building, liberalism, citizenship, economic development and modernization, social organization and stratification, race and ethnicity, gender relations, identity politics, reform and revolution, authoritarianism and democratization, and inter-American relations.

Also offered as LASC251. Credit granted for HIST251 or LASC251.

0101	Karin Rosemblatt	Seats (Total: 60)
	MW 2:00pm - 3:15pm	TYD 2106

HIST255 **African-American History, 1865 - Present**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SH, D	General Education: DSHS

An introductory course in the African-American experience in the United States from 1865 to the present. Topics include the aftermath of the Civil War on US race relations, the rise of segregation, northern migration, World War I and II, Civil Rights Movements, and the Black Power Movement.

Also offered as AASP298A. Credit only granted for HIST255 or AASP298A.

0101	Elsa Barkley Brown	Seats (Total: 35)
	TuTh 9:30am - 10:45am	KEY 1117

HIST269D **Special Topics in Study Abroad II; Barcelona: The City and Its History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

HIST269G **Special Topics in Study Abroad II; 20th Century Latin American History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

HIST269K **Special Topics in Study Abroad II; Mediterranean Culture and History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

HIST269M **Special Topics in Study Abroad II; History of Modern Italy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

HIST269O **Special Topics in Study Abroad II; Mediterranean Culture and History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

HIST269Y **Special Topics in Study Abroad II; Rome Republic & Empire**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

HIST284 **East Asian Civilization I**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SH, D	General Education: DSHS, DVUP

An interdisciplinary survey of the development of East Asian cultures. An historical approach drawing on all facets of East Asian traditional life, to gain an appreciation of the different and complex cultures of the area.

0101	Ting Zhang TuTh 2:00pm - 2:50pm Th 9:30am - 10:20am	Seats (Total: 20) SYM 0200 TLF 2103	Discussion
0102	Ting Zhang TuTh 2:00pm - 2:50pm Th 12:30pm - 1:20pm	Seats (Total: 20) SYM 0200 TLF 2103	Discussion
0103	Ting Zhang TuTh 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 20) SYM 0200 TLF 1101	Discussion
0104	Ting Zhang TuTh 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 20) SYM 0200 TLF 1101	Discussion

HIST285 **East Asian Civilization II**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SH, D	General Education: DSHS

A survey of the historical development of modern Asia since 1700. Primarily concerned with the efforts of East Asians to preserve their traditional cultures in the face of Western expansion in the 18th and 19th centuries, and their attempts to survive as nations in the 20th century.

0101	James Gao TuTh 12:30pm - 1:45pm	Seats (Total: 40) KEY 0126

HIST286 **The Jew and the City through the Centuries**

Credits: 3	Grading Method: Regular, Pass-Fail	CORE: SH, D	General Education: DSHS, DVUP

Also offered as: JWST275. Credit only granted for: HIST286 or JWST275.

Jewish urban experience from ancient times to the present. Public space and private. The city and the sacred. Jewish ghettos and quarters. The struggle over modern Jerusalem.

Also offered as JWST275. Credit only granted for HIST286 or JWST275.

0101	Bernard Cooperman MW 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 40) KEY 0116 ONLINE	

HIST289A **Jews, Christians, and Muslims in Medieval Spain: Tolerance, Oppression, and the Problematic Past**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP, SCIS

Also offered as RELS289C. Credit only granted for HIST289A or RELS289C. For 800 years, medieval Spain was home to one of the most religiously diverse societies in European history, where Jews, Christians, and Muslims lived and worked closely together. In the modern era, this period has been held up both as a model of successful interreligious harmony, and as a case study in religious discrimination and exclusion. Can the example of the Spanish past really teach us how to build-or how not to build-a society that embraces religious difference?

0101	Janna Bianchini MW 11:00am - 11:50am M 1:00pm - 1:50pm	Seats (Total: 20) SYM 0200 KEY 0117	Discussion
0102	Janna Bianchini MW 11:00am - 11:50am M 2:00pm - 2:50pm	Seats (Total: 20) SYM 0200 KEY 0117	Discussion
0103	Janna Bianchini MW 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 20) SYM 0200 KEY 0117	Discussion
0104	Janna Bianchini MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 20) SYM 0200 KEY 0117	Discussion

HIST289R **Pocketbook Politics: A History of American Buying and Selling**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, SCIS

0101	Katarina Keane TuTh 2:00pm - 2:50pm M 9:00am - 9:50am	Seats (Total: 20) KEY 0106 KEY 0117	Discussion
0102	Katarina Keane TuTh 2:00pm - 2:50pm M 10:00am - 10:50am	Seats (Total: 20) KEY 0106 KEY 0117	Discussion
0103	Katarina Keane TuTh 2:00pm - 2:50pm M 11:00am - 11:50am	Seats (Total: 20) KEY 0106 KEY 0117	Discussion
0104	Katarina Keane TuTh 2:00pm - 2:50pm M 1:00pm - 1:50pm	Seats (Total: 20) KEY 0106 TLF 1101	Discussion
0106	Katarina Keane TuTh 2:00pm - 2:50pm Tu 11:00am - 11:50am	Seats (Total: 20) KEY 0106 TLF 2103	Discussion
0107	Katarina Keane TuTh 2:00pm - 2:50pm Tu 12:30pm - 1:20pm	Seats (Total: 20) KEY 0106 KEY 1117	Discussion
0110	Katarina Keane TuTh 2:00pm - 2:50pm W 11:00am - 11:50am	Seats (Total: 20) KEY 0106 KEY 0117	Discussion
0112	Katarina Keane TuTh 2:00pm - 2:50pm W 1:00pm - 1:50pm	Seats (Total: 20) KEY 0106 TLF 1103	Discussion

HIST289V **What Does It Mean to be An American?**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

This course seeks to understand the on-going crisis over national identity and purpose by examining the many factors that go into the big stew known as America.

0101	Michael Ross MW 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 20) KEY 0106 KEY 0116	Discussion
0102	Michael Ross MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 20) KEY 0106 KEY 0116	Discussion
0104	Michael Ross MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 20) KEY 0106 KEY 0116	Discussion
0105	Michael Ross MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 20) KEY 0106 KEY 0116	Discussion

HIST289X **History and the Politics of American Memory**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

0101	Colleen Woods TuTh 12:30pm - 1:20pm W 10:00am - 10:50am	Seats (Total: 20) PLS 1140 TLF 1103	Discussion
0102	Colleen Woods TuTh 12:30pm - 1:20pm W 11:00am - 11:50am	Seats (Total: 20) PLS 1140 TLF 1103	Discussion
0103	Colleen Woods TuTh 12:30pm - 1:20pm W 12:00pm - 12:50pm	Seats (Total: 20) PLS 1140 TLF 1103	Discussion
0104	Colleen Woods TuTh 12:30pm - 1:20pm Th 11:00am - 11:50am	Seats (Total: 20) PLS 1140 TLF 2103	Discussion

HIST289Y **Zombies, Fear, and Contagion: A Cultural History of Public Health, Medicine, and Technology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DSHU, DVUP, SCIS

0101	Chantel Rodriguez MW 2:00pm - 2:50pm M 9:00am - 9:50am	Seats (Total: 20) ESJ 0224 KEY 0100	 Discussion
0102	Chantel Rodriguez MW 2:00pm - 2:50pm M 10:00am - 10:50am	Seats (Total: 20) ESJ 0224 KEY 0100	 Discussion
0103	Chantel Rodriguez MW 2:00pm - 2:50pm M 11:00am - 11:50am	Seats (Total: 20) ESJ 0224 KEY 0100	 Discussion
0104	Chantel Rodriguez MW 2:00pm - 2:50pm M 1:00pm - 1:50pm	Seats (Total: 20) ESJ 0224 TLF 2103	 Discussion
0105	Chantel Rodriguez MW 2:00pm - 2:50pm Th 9:30am - 10:20am	Seats (Total: 20) ESJ 0224 JMZ 0118	 Discussion
0106	Chantel Rodriguez MW 2:00pm - 2:50pm Th 11:00am - 11:50am	Seats (Total: 20) ESJ 0224 JMZ 1103	 Discussion
0107	Chantel Rodriguez MW 2:00pm - 2:50pm Th 12:30pm - 1:20pm	Seats (Total: 20) ESJ 0224 JMZ 1226	 Discussion
0108	Chantel Rodriguez MW 2:00pm - 2:50pm Th 2:00pm - 2:50pm	Seats (Total: 20) ESJ 0224 JMZ 1226	 Discussion
0109	Chantel Rodriguez MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 20) ESJ 0224 TLF 2103	 Discussion
0110	Chantel Rodriguez MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 20) ESJ 0224 TLF 2103	 Discussion

0111	Chantel Rodriguez MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 20) ESJ 0224 TLF 2103	 Discussion
0112	Chantel Rodriguez MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 20) ESJ 0224 TLF 2103	 Discussion

HIST299 **Directed Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Closely guided research in primary sources for students currently enrolled in selected 100- or 200-level surveys in the Department of History.

Prerequisite: permission of department.

Contact department for information to register for this course.

HIST307 **The Holocaust of European Jewry**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as: JWST345. Credit only granted for: HIST307 or JWST345.

Roots of Nazi Jewish policy in the 1930's and during World War II: the process of destruction and the implementation of the "final solution of the Jewish problem" in Europe, and the responses made by the Jews to their concentration and annihilation.

0101	Marsha Rozenblit TuTh 3:30pm - 4:45pm	Seats (Total: 47) TYD 2106

HIST310 **History of South Africa**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Formerly: HIST419E.

Explores the roots of Apartheid and the anti-Apartheid movement from precolonial times to the present: the social history of work and identity, the rise of kingdoms (Zulu, Sotho), conquest and colonial administration, urban and rural mass politics, gender relations, and the transition to democracy.

0101	Paul Landau TuTh 2:00pm - 3:15pm	Seats (Total: 30) KEY 0100

HIST319A **Special Topics in History; City God, Dragon Boat, and Monkey King: Popular Culture and Society in Imperial China**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Ting Zhang TuTh 11:00am - 12:15pm	Seats (Total: 30) TLF 1101

HIST319I **Special Topics in History; The Lion and the Man: Frederick Douglass's Life and Times**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as AMST328Y. Credit granted for HIST319I or AMST328Y.

0101	Christopher Bonner TuTh 11:00am - 12:15pm	Seats (Total: 35) KEY 1117

HIST319R **Special Topics in History; Genghis Khan and the Mongols: Destroyers of Worlds and Patrons of Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Colleen Ho TuTh 2:00pm - 3:15pm	Seats (Total: 40) KEY 0103

HIST320 **Early Christianity: Jesus to Constantine**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed one course in ancient history at the 200 level. Also offered as: JWST331. Credit only granted for: HIST320 or JWST331.

Social and religious history of early Christianity from its origins in the first century to the reign of Constantine.

Also offered as JWST331. Credit granted for HIST320 or JWST331.

0101	Elizabeth Conner TuTh 11:00am - 12:15pm	Seats (Total: 40) KEY 0103

HIST321 **Biblical History and Culture**

Credits: 3 Grading Method: Regular

Also offered as: JWST324. Credit only granted for: HIST321 or JWST324. Formerly: HEBR333.

Study of the political, social, and religious development of the Jewish nation from its inception to its return from exile in Babylonia around 536 C.E. Focus on biblical texts, archaeological finds, and source materials from neighboring cultures to reconstruct political history and the development of religious concepts.

0101	Matthew Suriano TuTh 2:00pm - 3:15pm	Seats (Total: 40) SQH 1103

HIST327 The Roman Empire

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Roman history from Augustus to Heraclius, 44BC-641AD: The Imperial cour and government; the diversity of culture in provinces and cities and the progress of Romanization; Roman religion and its transformation in late antiquity; the Roman army and defense of the frontiers.

0101	Elizabeth Conner TuTh 3:30pm - 4:45pm	Seats (Total: 40) SQH 1103

HIST328C Selected Topics in History; Arts, Leisure, and Entertainment: Urban Life in Modern Iran

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as HIST328C. Credit granted for PERS398B, HIST328C, JWST319I, or TDPS358B. From traditional to modern forms of art and entertainment, from popular and youth culture to the official, and from the underground art scene to online social media, this cultural history course sheds light on the formation and transformations of the urban public culture in modern Iran. Taught in English.

0101	Ida Meftahi MW 3:30pm - 4:45pm	Seats (Total: 30) JMZ 1122

HIST328G Selected Topics in History; Heretics, Witches, and Slaves: Marginalized Communities in the Middle Ages

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Janna Bianchini MW 2:00pm - 3:15pm	Seats (Total: 40) SQH 1103

HIST328L **Selected Topics in History; Empires, Revolutions, and Cold Wars: Modern Central and Eastern Europe**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

We live in an international system dominated by accusations of growing Russian power and meddling in the affairs of other countries -- from the civil war that has raged in Ukraine since 2013, to the US presidential elections of 2016. These stories show that Central and Eastern Europe --a region largely taken for granted since the end of the Cold War -- has once again become a battleground for the future of the international order. This course will both offer a broad overview of that region's history since the late 1700s -- through empires, revolutions, and cold wars -- and provide students with the critical tools to develop their own views on that history.

0101	Piotr H Kosicki	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	KEY 0116

HIST328N **Selected Topics in History; The History of Medicine**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

This course meets once per week on campus; the rest of the course content will be on ELMS. A history of medicine from antiquity to the present. Principal goals include the exploration of historical perspectives on the development of medical advances and practices such as diagnosis, therapeutics, surgery, nursing, dentistry, pharmacy, psychiatry, medical ethics, and the role of both men and women in shaping the history of medical sciences.

0101	Philip Mackowiak	Seats (Total: 40)
	Tu 11:00am - 12:15pm Class time/details on ELMs	PLS 1119 ONLINE

HIST328Q **Selected Topics in History; Queer History of Classics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Also offered as CLAS309Q, WMST379Q, and LGBT398Q. Credit granted for CLAS309Q, HIST328Q, WMST379Q, and LGBT398Q. In Classics and Queer History, we will explore ancient and modern paradigms of sex, gender, and sexuality and discuss queer uses of and struggles with the past and the idea of the Classical. To do this, we will examine diverse works of ancient Greek and Roman literature and visual art, as well as works from later periods sonnets, operas, novels, films, scholarship, and more that adapt ancient stories and ideas for their own, queer purposes. As we move across time, geography, and cultures, we will keep in mind the over-arching questions, what is queer history, and why might one pursue it?

0101	Robert Matera MWF 2:00pm - 2:50pm	Seats (Total: 30) VMH 1207

HIST328V **Selected Topics in History; Ancient Greek Religion: Gods, Myths, Temples**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as CLAS330 and RELS370. Credit only granted for CLAS330, HIST328V, or RELS370. Survey of Greek religious ideas and practices as they evolve from the Bronze Age to the early Christian period.

0101	Jorge Bravo TuTh 2:00pm - 3:15pm	Seats (Total: 35) KEY 0116

HIST328Y **Selected Topics in History; Women in Chinese History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Dewen Zhang TuTh 2:00pm - 3:15pm	Seats (Total: 35) TLF 2108

HIST329A **Special Topics in History; Cities of Real & Imagined Disasters**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The history of real and imagined urban disasters in modern global history is examined through the study of events such as earthquakes, hurricanes, fires, terrorism, and the creation of monsters such as Godzilla and King Kong. The course includes the study of the significance of historical events such as Hurricane Katrina, the San Francisco and Mexico City earthquakes, Hiroshima, Chernobyl, and 9/11.

0101	Daniel Richter MW 2:00pm - 3:15pm	Seats (Total: 35) SQH 1121

HIST329B **Special Topics in History; Drugs in the Modern World: From Opium Wars to the War on Drugs**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Daniel Richter MW 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 40) KEY 0103 ONLINE

HIST329D **Special Topics in History; Understanding the Israeli-Palestinian Conflict through Opposing Histories**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Also offered as ISRL329D. Credit granted for HIST329D or ISRL329D. Israelis and Palestinians have been fighting over the Land of of Palestine/Israel for over a century, but both sides date their relationship to the Land back many centuries, even millenia. We will look at the history but especially the "narratives" that the two sides employ to explain and justify, both to themselves and others, their claims to the land, and how these narratives have both molded the shape of the conflict and been molded by it, and changed over time. This is not solely a history course, though it will cover the relevant history. It will focus on the importance of narratives to the continuation of the conflict, as well as elements relating to identity, religion, archaeology, morality, and human rights. No previous knowledge is expected, but those with such knowledge will find it useful.

0101	Paul Scham	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	JMZ 0208

HIST329F **Special Topics in History; Religious and Political Transformations in Modern Jewish History, 1650-1870**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Also offered as JWST319V. Credit granted for HIST329F or JWST319V. Analysis of the social, cultural, and political forces that led to the emancipation of the Jews and the integration of a once detested ethnic- religious group into European society. Attention will be paid to new Jewish religious movements, including Reform Judaism and Neo-Orthodoxy, as well as to the profound changes in Jewish life-style in the nineteenth century.

0101	Marsha Rozenblit	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	KEY 0100

HIST329L **Special Topics in History; Riches and Ruin: A Global History of Capitalism**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Surveys the development of capitalism since the 1500s from a global perspective, focusing on Asia, Africa, and Latin America. Topics include commodity flows, labor migration, the environment, markets, and entrepreneurs. Engagement with key scholarly debates, primary sources, and digital methods.

0101	Mircea Raianu	Seats (Total: 40)
	MW 2:00pm - 3:15pm	ASY 3207

HIST329X **Special Topics in History; Mobility in History: Planes, Trains, and Automobiles**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Thomas Zeller	Seats (Total: 30)
	MW 2:00pm - 3:15pm	TLF 1103

HIST333 **The European Reformations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HIST111; or permission of instructor. Also offered as: RELS343. Credit only granted for: HIST333 or RELS343.

Examination of developments in European religion between 1450 and 1700; the late-medieval Church and its critics; rise of Protestant thought in Germany and its spread throughout Europe; reform efforts in the Catholic Church; religious wars and violence and their impact on state and society; consequences of religious reform in society and its impact on the family and women.

Also offered as RELS343. Credit granted for HIST333 or RELS343.

0101	Stefano Villani	Seats (Total: 30)
	TuTh 9:30am - 10:45am	TLF 1101

HIST353 **America in the Revolutionary Era, 1763-1815**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The background and course of the American Revolution and early nationhood through the War of 1812. Emphasis on how the Revolution shaped American political and social development, the creation of a new government under the Constitution, and the challenges facing the new nation.

0101	Holly Brewer	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	HJP 2242

HIST354 **Ante-Bellum America 1815-1861**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HIST200, HIST210, HIST213, HIST222, HIST254, or HIST275; or must have completed HIST156; or permission of instructor.

Traces how the strong nationalism after the War of 1812 transformed int the sectionalism that led to Civil War. The course concentrates on the controversies over slavery and other issues contributing to North-South antagonism, including Jacksonian democracy, capitalism, racism, immigration, manifest destiny and religious, social, and intellectual movements, each of which produced its own social tendencies and tensions.

0101	Robert Chiles TuTh 2:00pm - 3:15pm	Seats (Total: 40) KEY 0126

HIST356 **Emergence of Modern America, 1900-1945**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HIST201, HIST211, HIST213, HIST222, HIST255, or HIST275; or must have completed HIST157; or permission of instructor.

The emergence of modern institutions and identities, 1900-1945. These institutions may include corporate enterprises and the welfare state; identities include homosexuality, the New Woman, and the New Negro.

0101	Robert Chiles TuTh 9:30am - 10:45am	Seats (Total: 40) KEY 0116

HIST357 **Recent America: 1945-Present**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HIST201, HIST211, HIST213, HIST222, HIST255, or HIST275; or must have completed HIST157; or permission of instructor.

American history from the inauguration of Harry S. Truman to the presen with emphasis upon politics and foreign relations, but with consideration of special topics such as radicalism, conservatism, and labor.

0101	Jeffrey Coster MW 2:00pm - 3:15pm	Seats (Total: 40) KEY 0103

HIST376 **History of Modern Israel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as: ISRL342. Credit only granted for: HIST376 or ISRL342.

History of modern Israel since the beginning of the Zionist settlement in 1882. Attention to different interpretations and narratives of Israel's history, including the historical and ideological roots of Zionism, the establishment of the State of Israel, ideological forces, wars, and the triumphs and crises of democracy.

0101	Yoram Peri	Seats (Total: 60)
	MW 3:30pm - 4:45pm	TYD 0102

HIST386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Permission of ARHU-History department; and junior standing or higher.

The History Department's Internship program. Pre-professional experience in historical research, analysis, and writing in a variety of work settings.

Contact department for information to register for this course.

HIST396 **Honors Colloquium II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: CS General Education: DSSP

Prerequisite: Permission of ARHU-History department; or HIST395. Restriction: Must be in History program.

Uses a seminar approach to examine a major problem of historical interpretation across two or more diverse cultures in different periods. Topics vary and include: religion and society, the city in history, gender, slavery and emancipation, and modernization.

0101	Thomas Zeller	Seats (Total: 12)
	M 12:00pm - 1:50pm	TLF 2101
	Contact instructor or department for details.	

HIST399 **Honors Thesis II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Individualized research and preparation of History Honors Theses.

Contact department for information to register for this course.

HIST405 **Environmental History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introduction to the key issues and methods of environmental history. The scope of the subject is discussed, as well as its relationship with other disciplines, such as ecology, anthropology, and geography. A primary focus is environmental change in history with emphasis on the American experience.

0101	Thomas Zeller W 3:30pm - 6:00pm	Seats (Total: 20) TLF 2103

HIST408A **Senior Seminar; The Worlds of Benjamin Franklin**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

To a remarkable extent, Franklin witnessed and created the world that seems familiar to us now. His long life (1706-1790) spanned most of the eighteenth century, making his incredibly varied accomplishments a superb measure of the cultural and historic changes in this era. What's more, he began his life at a modest level but then ended it as the most famous American of his day, his self-made manhood making him an excellent case study of the differences between ordinary and extraordinary lives, typical and atypical experiences, common and elite cultures.

0101	Richard Bell M 1:00pm - 2:50pm Contact instructor or department for details.	Seats (Total: 12) TLF 2108

HIST408C **Senior Seminar; The Construction of Jewish Knowledge**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

0101	Bernard Cooperman M 2:00pm - 3:50pm Contact instructor or department for details.	Seats (Total: 6) TLF 2100

HIST408E **Senior Seminar; Empire and Central Asia**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

Prerequisite: Permission of department. An exploration of the role of empire in the making of modern Central Asia. Focus on five former Soviet republics, Afghanistan and Xinjiang (western China).

0101	Sarah Cameron	Seats (Total: 12)
	W 11:00am - 12:50pm Contact instructor or department for details.	TLF 2108

HIST408G **Senior Seminar; Slavery, Freedom, and Citizenship**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

0101	Christopher Bonner	Seats (Total: 12)
	Tu 2:00pm - 3:50pm Contact instructor or department for details.	WDS 1127

HIST408Q **Senior Seminar; Death in the Biblical World**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

Death, burial, and concepts of the afterlife in the ancient Mediterranean cultures with a particular focus on ancient Israel and early Judaism. Source material, both texts and artifacts, will be examined within the contexts of the ancient Near East (Egypt and Mesopotamia) and the Classical World (Greece and Rome).

0101	Matthew Suriano	Seats (Total: 5)
	Tu 4:00pm - 6:00pm Contact instructor or department for details.	SQH 1123

HIST408W **Senior Seminar; Votes for Women in Maryland!**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

Each student will research and write biographical sketches of two woman suffragists for publication in a crowdsourced historical encyclopedia. Through this work, students will hone their research and writing skills as they become published authors!

0101	Robyn Muncy	Seats (Total: 15)
	Th 2:00pm - 3:50pm	TLF 2103
	Contact instructor or department for details.	

HIST408X **Senior Seminar; Britain at War: A Social and Cultural History, From WWI to the Cold War**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

Prerequisite: Permission of department. From the idealism of the "Soldier Poets" of 1914 who believed war would be "a great adventure" to the apocalyptic fears of the Cold War generation, war has shaped Twentieth Century British social and cultural history, especially British notions of class and gender. This is a readings based seminar, using memoirs, novels, and films, as well as secondary sources.

0101	Julie Taddeo	Seats (Total: 12)
	M 10:00am - 11:50am	TLF 2108
	Contact instructor or department for details.	

HIST415 **Ideas and Politics in Europe Since 1900**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Examination of intersection of ideas and politics in Europe since 1900. Focus will be on advocates of liberalism, social democracy, fascism, Nazism, communism, and conservatism and their impact on politics and policy since 1900.

0101	Jeffrey Herf	Seats (Total: 40)
	MW 2:00pm - 3:15pm	KEY 0126

HIST417 **Colonial Encounters: Natives, Spaniards, and Africans in the New World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: HIST220 and HIST250. Credit only granted for: HIST417 or HIST428Y. Formerly: HIST428Y.

An exploration of the discourses and practices of the Spanish colonial project in the New World and the ways in which Indians and Blacks were incorporated into or excluded from that project. Also examines native and African resistance and adaptation to Spanish rule, and the process of transformation and hybridization of Spanish, native and African cultures in Spanish America. An analysis of recent historiographical developments that have profoundly changed the understanding of the Spanish conquest and colonization of the New World.

0101	Alejandro Caneque	Seats (Total: 30)
	MW 2:00pm - 3:15pm	KEY 0100

HIST419F **Special Topics in History; Public History**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Introduces students to the modes and skills historians deploy in order to foster historical understanding and thinking beyond publication and the classroom. Students will analyze examples of public history and create a proposal for a public history project that builds on their own scholarly work. This class will use the Smithsonian's National Museum of American History as a laboratory and class sessions will be held there. On several occasions, students will be required to experience the museum outside of class hours.

0101	Kenneth Cohen	Seats (Total: 20)
	F 2:00pm - 4:30pm	Location: TBA

HIST428B **Selected Topics in History; Seven Revolutions in Postwar Africa**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Paul Landau	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	KEY 0100

HIST428F **Selected Topics in History; Cultural Imagination in the US-China Relations since 1785**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	James Gao	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	KEY 0100

HIST428J **Selected Topics in History; Global Revolutions in the Modern Era: From France, to Russia, to Poland, to Tunisia, to Ukraine**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

What are the key social, cultural, political, and economic causes of revolution? How and why have modern revolutions migrated across borders, continents, and oceans? This seminar -- intended for both advanced undergrads and graduate students -- considers the American, French, and Russian Revolutions as global events before exploring the rise and fall of Communist regimes in the Soviet Union and in Eastern Europe, the failed Tiananmen Square revolution in China, the rise of the mujahideen in Afghanistan and the end of apartheid in South Africa. The seminar closes with challenges facing the global order in the 21st century, including ongoing struggles in the Middle East, North Africa, and Eastern Europe.

0101	Piotr H Kosicki Tu 3:30pm - 6:00pm	Seats (Total: 6) TLF 2108

HIST428K **Selected Topics in History; US in the World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Colleen Woods Th 3:30pm - 6:00pm	Seats (Total: 10) TLF 2101

HIST428M **Selected Topics in History; Oral History of Immigration**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP, DVCC

Uses oral history to explore experiences of migrants to the Washington, D.C. area since the mid-twentieth century in projects based on engagement with local immigrants.

0101	Anne Rush TuTh 2:00pm - 3:15pm	Seats (Total: 20) TLF 1103

HIST428O **Selected Topics in History; Tea and the Global World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

0101	Dewen Zhang Tu 9:30am - 12:00pm	Seats (Total: 15) TLF 2108

HIST428V **Selected Topics in History; Staging War: The US Military Beyond the Battlefield**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

0101	Patrick Chung Tu 3:30pm - 6:00pm	Seats (Total: 20) EGR 1110

HIST429D **Special Topics in History; The Soviet Union and the World**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

0101	Sarah Cameron MW 2:00pm - 3:15pm	Seats (Total: 40) TYD 2110

HIST429F **Special Topics in History; MAC to Millennium: History of the University of Maryland**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Through extensive use of primary documents, students will gain an overview of the history of UMD, from its founding in 1856 to the presentday.

0101	Anne Turkos Th 2:00pm - 4:30pm	Seats (Total: 30) HBK 3210

HIST429R **Special Topics in History; Imperial Russia's World Connections**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

0101	Mikhail Dolbilov Th 2:00pm - 4:30pm	Seats (Total: 15) TLF 2100

HIST429T **Special Topics in History; Wealth and Poverty in the Modern Indian City**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Explores the history of urban life in South Asia from the 18th century to the present using a case study approach and varied sources from history to literature and art. Focuses on the long-term dynamic between opportunity and inequality and the challenges of living together across ethnic, religious, gender, and class divides.

0101	Mircea Raianu Tu 12:30pm - 3:00pm	Seats (Total: 20) TLF 2103

HIST429Y **Special Topics in History; Islamic Memory: The Prophet Mohammed and the Founding Generation of Islam**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as RELS419A. Credit granted for HIST429Y or RElS419A.

0101	Antoine Borrut	Seats (Total: 10)
	W 3:30pm - 6:00pm	TLF 2100

HIST430 **Reforming Politics, Religion, and Gender Relations in England 1485-1603**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An examination of the political, religious, and social forces in English life, 1485-1603, with special emphasis on Tudor government, the English reformation, and the Elizabethan era.

0101	Sabrina Baron	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TLF 1101

HIST436 **Napoleon, the French Revolution, and the World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An argument for the broad continuity between the revolutionary and Napoleonic wars.

0101	Thomas Kaiser	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	SYM 0215

HIST455 **Constitutional History of the United States: Since 1865**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

American public law and government, with emphasis on the interaction of government, law, and politics, and the relationship between the constitution and social forces and influences, the way in which constitutional principles, rules, ideas, and institutions affect events and are in turn affected by events. Major crises in American government and politics such as Reconstruction,the rise of corporate power, civil liberties during wartime, the New Deal era, the civil disorders of the 1960s.

0101	Michael Ross	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	TYD 2106

HIST462 **Slavery, Sectionalism, and the U.S. Civil War**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Slavery, sectionalism, and the coming of the Civil War. Resources and strategy of the Confederacy and the Union, the war's changing character, emancipation and its consequences, conditions on the home front, and the wartime origins of Reconstruction.

0101	Michael Ross	Seats (Total: 20)
	Tu 3:30pm - 6:00pm	TLF 2103

HIST469Q **Study Abroad Special Topics IV; History of Spain I: Up to the 20th Century**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

HIST483 **History of Japan Since 1800**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Japan's renewed contact with the Western world and emergence as a modern state, industrial society, and world power, 1800-1931; and Japan's road to war, occupation, and recovery, 1931 to the present.

0101	Louisa Rubinfien	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	KEY 0116

HIST499 **Independent Study**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: permission of department.

Contact department for information to register for this course.

HIST601 **History and Contemporary Theory**

Credits: 3

Grading Method: Regular, Audit

An introduction to contemporary theories in philosophy, literary criticism, cultural studies, anthropology, and other fields; and analysis of their usefulness to historians.

0101	Karin Rosemblatt W 3:30pm - 6:00pm	Seats (Total: 12) TLF 2108

HIST607 **The Teaching of History in Institutions of Higher Learning**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

For majors only.

0101	Ahmet Karamustafa Contact instructor or department for details.	Seats (Total: 15)
0201	Antoine Borrut Contact instructor or department for details.	Seats (Total: 6)

HIST608B **General Seminar; American History**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

General seminar in student's major field of study (e.g., U.S.; Women an Gender; International, World, and Comparative; Science and Technology; Latin America) exploring the concentration's major issues, topics, and literature.

Prerequisite: permission of department.

0101	Julie Greene Th 3:30pm - 6:00pm	Seats (Total: 12) TLF 2108

HIST608D **General Seminar; Middle East History**

Credits: 3 Grading Method: Regular, Audit

General seminar in student's major field of study (e.g., U.S.; Women an Gender; International, World, and Comparative; Science and Technology; Latin America) exploring the concentration's major issues, topics, and literature.

0101	Ahmet Karamustafa Tu 3:30pm - 6:00pm	Seats (Total: 12) TLF 3107

HIST619A **Special Topics in History; Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Prerequisite: permission of department.

Contact department for information to register for this course.

HIST619B **Special Topics in History; Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Prerequisite: permission of department.

Contact department for information to register for this course.

HIST619C **Special Topics in History; Colonial and Revolutionary America**

Credits: 3 Grading Method: Regular, Audit

0101	Holly Brewer Tu 3:30pm - 6:00pm	Seats (Total: 12) TLF 2101

HIST619F **Special Topics in History; Public History**

Credits: 3 Grading Method: Regular, Audit

Introduces students to the modes and skills historians deploy in order to foster historical understanding and thinking beyond publication and the classroom. Students will analyze examples of public history and create a proposal for a public history project that builds on their own scholarly work. This class will use the Smithsonian's National Museum of American History as a laboratory and class sessions will be held there. On several occasions, students will be required to experience the museum outside of class hours.

0101	Kenneth Cohen F 2:00pm - 4:30pm	Seats (Total: 10) Location: TBA

HIST619J **Special Topics in History; US in the World**

Credits: 3 Grading Method: Regular, Audit

0101	Colleen Woods Th 3:30pm - 6:00pm	Seats (Total: 10) TLF 2101

HIST619P **Special Topics in History; History and Theory of Popular Culture in the 20th Century**

Credits: 3 Grading Method: Regular, Audit

0101	Saverio Giovacchini M 6:00pm - 8:30pm	Seats (Total: 12) TLF 2103

HIST638J **Special Topics in History; Global Revolutions in the Modern Era: Fron France, to Russia, to Poland, to Tunisia, to Ukraine**

Credits: 3 Grading Method: Regular, Audit

Special Topics in History.

What are the key social, cultural, political, and economic causes of revolution? How and why have modern revolutions migrated across borders, continents, and oceans? This seminar -- intended for both advanced undergrads and graduate students -- considers the American, French, and Russian Revolutions as global events before exploring the rise and fall of Communist regimes in the Soviet Union and in Eastern Europe, the failed Tiananmen Square revolution in China, the rise of the mujahideen in Afghanistan and the end of apartheid in South Africa. The seminar closes with challenges facing the global order in the 21st century, including ongoing struggles in the Middle East, North Africa, and Eastern Europe.

0101	Piotr H Kosicki Tu 3:30pm - 6:00pm	Seats (Total: 6) TLF 2108

HIST639O **Special Topics in History; Power and Authority in the Medieval and Early Modern World**

Credits: 3 Grading Method: Regular, Audit

Special Topics in History.

0101	Alejandro Caneque W 6:00pm - 8:30pm	Seats (Total: 12) TLF 2101

HIST639X **Special Topics in History; Comparative American Borderlands**

Credits: 3 Grading Method: Regular, Audit

Special Topics in History.

0101	Chantel Rodriguez W 6:00pm - 8:30pm	Seats (Total: 12) TLF 2103

HIST639Y **Special Topics in History; Islamic Memory: The Prophet Mohammed and the Founding Generation of Islam**

Credits: 3 Grading Method: Regular, Audit

Special Topics in History.

0101	Antoine Borrut	Seats (Total: 5)
	W 3:30pm - 6:00pm	TLF 2100

HIST708 **Directed Independent Reading for Comprehensive Examinations I**

Credits: 1-4 Grading Method: Sat-Fail

Directed reading in preparation for Doctoral Comprehensive Examinations In consultation with their advisors, students will select a number of books and articles from an approved list. Grading for the course will reflect performance on the written and oral sections of the Comprehensive Examinations.

Contact department for information to register for this course.

HIST709 **Directed Independent Reading for Comprehensive Examinations II**

Credits: 1-4 Grading Method: Sat-Fail

Directed reading in preparation for Doctoral Comprehensive Examinations. In consultation with their advisors, students will select a number of books and articles from an approved list. Grading for the course will reflect performance on the written and oral sections of the Comprehensive Examinations.

Contact department for information to register for this course.

HIST799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

HIST810 **Museum Research Seminar**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: AMST655, ANTH655, or HIST610. Also offered as: ANTH856, AMST856. Credit only granted for: AMST856, ANTH856, or HIST810.

A research seminar focusing on the practice and presentation of cultura and historical scholarship in museums and historical sites. Students will complete an original research project on the challenges and opportunities of public exhibition and interpretation of cultural and historical research.

0101	Mary Alexander M 1:00pm - 3:45pm	Seats (Total: 15) WDS 1130

HIST811 **Museum Scholarship Practicum**

Credits: 3-6 Grading Method: Regular

Prerequisite: AMST856, ANTH856, or HIST810. Restriction: Permission of Museum Scholarship Program required. Also offered as: ANTH857, AMST857. Credit only granted for: AMST857, ANTH857, or HIST811.

Students devise and carry out a research program using the collections at the Smithsonian Institution or some other cooperating museum, working under joint supervision of a museum professional and a university faculty member.

0401	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0402	Paul Jaeger Contact instructor or department for details.	Seats (Total: 5)

HIST819A **Special Topics in History: Independent Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Individual graduate research in an area not covered by current seminar offerings. The product will be a finished research paper normally based on original materials.

Department permission required.

Contact department for information to register for this course.

HIST819B **Special Topics in History: Independent Research**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Individual graduate research in an area not covered by current seminar offerings. The product will be a finished research paper normally based on original materials.

Department permission required.

Contact department for information to register for this course.

HIST819N **Special Topics in History: Independent Research; Microhistory Research Seminar**

Credits: 3 Grading Method: Regular, Audit

Individual graduate research in an area not covered by current seminar offerings. The product will be a finished research paper normally based on original materials.

This graduate research seminar is designed to assist graduate students in the conception, research, writing, and revision of a 10,000-14,000-word piece of original micro history that will follow the formal conventions of an article in a scholarly journal and will be of publishable quality.

0101	Richard Bell	Seats (Total: 12)
	Tu 6:00pm - 8:30pm	TLF 2108

HIST819Y **Special Topics in History: Independent Research; Global Research Seminar**

Credits: 1-3 Grading Method: Regular, Audit

Individual graduate research in an area not covered by current seminar offerings. The product will be a finished research paper normally based on original materials.

0101	David Sartorius	Seats (Total: 12)
	Tu 6:00pm - 8:30pm	TLF 2100

HIST898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

HIST899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

HLMN Hillman Entrepreneurs Program Spring 2019

HLMN471 **Entrepreneurial Finance**

Credits: 3 Grading Method: Regular

Restriction: Restricted to students in the Hillman Entrepreneurs Program. Credit only granted for: HLMN471, ENES466 or BMGT365. Additional information: HLMN471 may not count toward any BMGT major or minor degree.

Examine the elements of entrepreneurial finance, develop and analyze financial statements, focusing on technology-based startup ventures and the early stages of company development. Address key questions that challenge all entrepreneurs: how much money can and should be raised; when it should be raised and from whom; how to define a reasonable valuation of a company; and how to structure funding, develop employment contracts, and make exit decisions. Analyze the variety of financing models across a venture's life cycle, with an aim to understanding the incentives of each type of investor and the relative costs and benefits of each source of funding.

0101	Brian Baick	Seats (Total: 60)
	F 1:00pm - 3:30pm	ESJ 1215

HLMN473 **Consulting in Tech Entrepreneurship**

Credits: 3 Grading Method: Regular

Restriction: Restricted to students in the Hillman Entrepreneurs Program. Additional information: HLMN473 may not count toward any BMGT major or minor degree.

Apply the entrepreneurship/business principles learned in the classroom to real-world consulting projects. Gain practical experience by solving actual business situations and by dealing with ambiguity and uncertainty inherent in fast-moving technical organizations. Develop key skills in negotiation, group dynamics, organization, and planning.

0101	Martin Cadirola, Gul Branco	Seats (Total: 60)
	F 1:00pm - 3:30pm	HJP 2242

HLSA Health Services Administration Spring 2019

HLSA300 **Introduction to Health Policy and Services**

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in SPHL100 or PHSC300. Restriction: Must be in Public Health Science program; and must have earned a minimum of 60 credits. Credit only granted for: SPHL498P or HLSA300. Formerly: SPHL498P.

A multidimensional view of public health policy and services. Through interactive discussion of assigned readings, team-based learning, and supplementary lecture, students will learn about the nature of and development of policy, public health policy, and financing and delivery of health care services. This course will place a significant emphasis on a team-based learning approach to understanding the health care system and health care reform.

Restricted to College Park students in the Public Health Science major (code: 12140).

0101	Neil Sehgal MW 10:00am - 10:50am W 11:00am - 11:50am	Seats (Total: 20) ESJ 2208 HBK 0109	 Discussion
0102	Neil Sehgal MW 10:00am - 10:50am W 12:00pm - 12:50pm	Seats (Total: 20) ESJ 2208 HBK 0109	 Discussion
0103	Neil Sehgal MW 10:00am - 10:50am W 2:00pm - 2:50pm	Seats (Total: 20) ESJ 2208 SPH 0308	 Discussion
0104	Neil Sehgal MW 10:00am - 10:50am W 3:00pm - 3:50pm	Seats (Total: 20) ESJ 2208 SPH 0308	 Discussion
0105	Neil Sehgal MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 20) ESJ 2208 JMP 1109	 Discussion
0106	Neil Sehgal MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) ESJ 2208 JMP 1109	 Discussion
0107	Neil Sehgal MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 20) ESJ 2208 JMP 1109	 Discussion

HLSA484 **Redesigning Health Care: Developing a Clinic to Meet Community Needs**

Credits: 3 Grading Method: Regular

Restriction: Must have completed a minimum of 60 credits. Additional information: Two sessions will be on-site at the Mona Clinic in Temple Hills, MD, and the remaining sessions will be taught in the University of Maryland's Academy for Innovation and Entrepreneurship.

Provides an opportunity for students to learn a key entrepreneurial skill, Design Thinking, while helping to build, reshape, redesign and transform delivery of health care in the Mona Center, a new community center and clinic in Prince George's County. This new, modern vision for a health and wellness clinic embraces student involvement in designing, planning and contributing to innovative programs, solutions, and processes to improve the clinic's ability to meet community and patient needs by addressing the social determinants of health as well as traditional clinical health status. Students in the class will develop empathy for patients, providers and other stakeholders, define problems, select a specific problem for intervention, understand problems based on stakeholder input, ideate, reframe and suggest options to solve or address the problem, prototype solutions, test ideas, and make recommendations to inform implementation and ongoing measurement and monitoring of impact.

0101	Stephen Thomas	Seats (Total: 25)
	F 10:00am - 12:30pm	ESJ 2101

HLSA688 **Independent Study**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Master or doctoral students who desire to pursue special research problems under the direction of a faculty memeber of the department may register for 1-6 hours of credit under this number.

Contact department for information to register for this course.

HLSA689 **Field Work in Aging**

Credits: 1-6 Grading Method: Regular

Individual instruction course.

0101	Lori Simon-Rusinowitz	Seats (Total: 1)
	Contact instructor or department for details.	

HLSA702 **Policy and Politics of Health**

Credits: 3 Grading Method: Regular, Audit

Organizational and financial components of the U.S. health care system, including social and political forces that bind the system. Advanced political analysis of the health care system, including key issues and problems.

Contact department for information to register for this course.

HLSA709 **Graduate Seminar**

Credits: 1 Grading Method: Sat-Fail, Audit

The purpose of the course is for doctoral students to present their work on their dissertation to fellow doctoral students and faculty in an informal supportive environment. Faculty and students provide feedback and suggestions that are helpful to the presenting students.

This class will meet every other week starting 1/30/2019.

0101	Luisa Franzini	Seats (Total: 10)
	W 2:00pm - 3:50pm	SPH 3302E

HLSA710 **Healthcare Management: Foundations and Principles**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Master of Health Administration (Master's) program; or must be in Health Services Ph.D. (Doctoral) program.

Concepts and managerial activities essential to achieve the goals of health care organizations are examined and discussed. Managerial processes include planning, decision-making, etc. required to operate and change health care organizations will be discussed. Special emphasis will be placed on the leader/managers role in developing and maintaining an effective system for providing healthcare.

0101	Neil Sehgal	Seats (Total: 25)
	Tu 4:00pm - 6:45pm	ATL 1109

HLSA711 **Health Economics and Analysis**

Credits: 3 Grading Method: Regular, Audit

Provides an analysis of health and health care services as economic goods. Using microeconomic theories, we will examine the behavior of health care providers, consumers, markets, and firms.

PLH1	Mir Ali	Seats (Total: 35)
	Class time/details on ELMs	ONLINE
	Must be in Public Health Policy & Practice Program. For permission to enroll, contact oes@umd.edu.	

HLSA712 **Advanced Health Economics and Analysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Completion of HLSA 711 or permission of department.

We will learn about the health care sector and how to apply the tools of economics to analyze the structure and performance of this section. Behavior of each of the agents in the market will be analyzed broadly: consumers, suppliers, and insurers, with issues of efficiency and equity in mind. The features of the market for health services are described with emphasis placed on the characteristics which make this market different from the markets for other goods and services. The areas in which market failure occurs are covered and the history and rationale for heavy government intervention in the market is described. The effects of government intervention are analyzed. Health economics is a broad field, encompassing a wide range of topics. Also, it frequently involves interdisciplinary research. We will examine selected topics in health economics in depth, with a review to developing great understanding and critical skills of published work in areas of current research interest the filed. Accordingly, we will discuss and critique a number of articles in details.

0101	Jie Chen	Seats (Total: 10)
	W 4:00pm - 6:45pm	PLS 1146

HLSA720 **Health Law and Ethics**

Credits: 3

Grading Method: Regular, Audit

The legal system helps determine the relationships prevailing among individuals, institutions and governments by setting out the rights, duties and powers of the various parties. This course will look at some of the more important concepts the law uses within the context of health services and public health.

PLH1	Negin Fouladi	Seats (Total: 35)
	Class time/details on ELMs	ONLINE
	Must be in Public Health Policy & Practice Program. For permission to enroll, contact oes@umd.edu.	

HLSA721 **Using Demographic Data for Health Policy Analysis**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: EPIB650; or students who have taken courses with comparable content may contact the department; or permission of instructor. Additional information: Priority enrollment will be given to students in the Department of Health Services Administration programs.

The goal of this course is to introduce students to the major demographic data sets that are used in health policy research and to provide hands-on experience using these data to answer policy oriented research questions

0101	Michel Boudreaux	Seats (Total: 20)
	Th 4:00pm - 6:45pm	SPH 0303

HLSA723 **Health Policy Analysis and Advocacy**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: HLSA601.

Examination of the politics of the health policy process, including the effects of American political structure and institutions; economic and social factors; interest groups, classes, and social movements; media and public opinion, and other factors. The emphasis is both on understanding how public policy is made as well as how to influence the process.Students will learn about (1) how health policy is developed, adopted, and implemented, (2) the political, institutional, economic, social, and other factors that influence and shape the process, and (3) the basic approaches and tools of strategic advocacy.

0101	Dylan Roby Tu 4:00pm - 6:45pm	Seats (Total: 25) ATL 2352

HLSA740 **Healthcare Strategic Planning and Marketing**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in SPHL-School of Public Health; or permission of instructor.

An understanding of strategic management and marketing is provided which enables the students to lead the process of strategic planning in a healthcare organization. By conducting a marketing and strategic planning process, health care organizations are better able to cope with dramatic changes in technological, social, political, regulatory, and competitive aspects of the health care market. Strategic management enables organizations to identify issues unique to them, which hinder or promote organizational success. Through course readings, class discussions, analyses of secondary quantitative and qualitative data, and presentation of case studies, students gain a thorough understanding of the strategic management process. Students will apply core competencies through a comprehensive strategic and marketing plan. Plans will be defended through an oral presentation.

0101	Christopher King Tu 7:00pm - 9:45pm	Seats (Total: 25) SPH 0303
PLH1	Negin Fouladi Class time/details on ELMs *Restricted to students in the Master of Public Health Practice and Policy and Graduate Certificate in Principles of Public Health programs.*	Seats (Total: 35) ONLINE

HLSA745 **Public Health Practice and Management**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in SPHL-School of Public Health; or permission of instructor.

Examines the relationship of practice and management in performing essential public health services on local, state and national levels.

Contact department for information to register for this course.

HLSA766 **Foundational Readings in Health Services Research**

Credits: 3 Grading Method: Sat-Fail

Prerequisite: Completion of the six HLSA Health Services Research core courses. Restriction: Must be in Health Services Ph.D. (Doctoral) program.

An overview of the foundational papers that inform health services research and its related disciplines; including literature on key conceptual models, classic empirical studies, and research illustrating cutting edge methods or findings. The major theoretical frameworks and empirical challenges of the field will be examined through critical reading and discussion among students. The course is organized around preparation for the qualifying exam in the Health Services Ph.D. program.

0101	Michel Boudreaux	Seats (Total: 12)
	Tu 4:00pm - 6:45pm	Location: TBA

HLSA772 **Healthcare Leadership and Communications**

Credits: 3 Grading Method: Regular, Audit

Health care administrators rely on transformational leadership skills and insights to help their organizations rise to the social financial, public health, and technological challenges of the future. Students will assess and develop their leadership strengths, apply key leadership communication principles, and critically analyze relevent leadership models, exploring their utility in addressing key leadership issues in health care organizations. An underlying theme will be the identification of core values involved in health care delivery, integration of those values in personal and organizational missions, and effective communication to stakeholders.

0101	Diane Dixon	Seats (Total: 20)
	Th 4:00pm - 6:45pm	SPH 0305

HLSA777 **Program Evaluation Field Experience**

Credits: 3 Grading Method: Regular

Additional information: Students will travel to the program site approximately three times to guide the evaluation design and collect data.

Program evaluation is a critical component in designing and operating effective programs. Organizations seek more accountability for the funds they provide to public or private projects. This course serves as an introduction to assessment methodology and evaluation tools commonly used in program evaluation. Students will gain practical experience through a series of exercises involving the design of a conceptual framework, development of indicators, and development of an evaluation plan to measure impact, and cost benefit/cost effectiveness analysis. The course will cover mixed methods research including qualitative and quantitative analysis, methodologies, and/or paradigms in a research study. Students will evaluate a community health program funded by the Maryland Community Health Care Commission (CHRC), and the Commission director will guide selection of the program.

0101	Lori Simon-Rusinowitz Tu 4:00pm - 6:45pm	Seats (Total: 10) SPH 0307

HLSA778 **Internship in Public Health**

Credits: 1-4 Grading Method: Regular, Audit

Internship providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

0401	Andrew Fenelon Contact instructor or department for details. *Contact instructor or department for details.*	Seats (Total: 5)
0601	Dylan Roby Contact instructor or department for details.	Seats (Total: 5)
PLH1	Negin Fouladi Class time/details on ELMs *Must be in Public Health Policy & Practice Program. For permission to enroll, contact oes@umd.edu.*	Seats (Total: 20) ONLINE

HLSA785 **Internship in Public Health**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of SPHL-Health Services Administration department. Credit only granted for: HLSA785 or HLSA778.

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

0201	Lori Simon-Rusinowitz Contact instructor or department for details. *Contact instructor or department for details.*	Seats (Total: 5)
0301	Neil Sehgal Contact instructor or department for details.	Seats (Total: 5)
0401	Andrew Fenelon Contact instructor or department for details.	Seats (Total: 5)
0501	Michel Boudreaux Contact instructor or department for details.	Seats (Total: 5)
0601	Dylan Roby Contact instructor or department for details.	Seats (Total: 5)
0701	Luisa Franzini Contact instructor or department for details.	Seats (Total: 5)
0801	Stephen Thomas Contact instructor or department for details.	Seats (Total: 5)
0901	Jie Chen Contact instructor or department for details.	Seats (Total: 5)
1001	Eva DuGoff Contact instructor or department for details.	Seats (Total: 5)
1101	Kellee White Contact instructor or department for details.	Seats (Total: 5)
PLH1	Negin Fouladi Class time/details on ELMs *Restricted to students in the Master of Public Health Practice and Policy and Graduate Certificate in Principles of Public Health programs.*	Seats (Total: 15) ONLINE

HLSA786 **Capstone Project in Public Health**

(Perm req) Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of SPHL-Health Services Administration department.

Capstone experience provding opportunity to apply knowledge and skills to a specific public health problem or issue. Completion of project relevant to public health under the direction of an advisor.

Contact department for information to register for this course.

HLSA787 **Minority Health and Health Equity**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in SPHL-School of Public Health; or permission of instructor.

A critical analysis of historical, political, economic, social, cultural, and environmental conditions that have produced an inequitable health status for racial and ethnic minorities in the United States.

0101	Stephen Thomas	Seats (Total: 20)
	Th 4:00pm - 6:45pm	ATL 1114

HLSA790 **Advanced Methods in Health Services Research**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EPIB650 and EPIB651; or permission of instructor.

Provides an in-depth examination of health services research literature with emphasis on methodological scrutiny and application of methods beyond linear regression such as categorical regression, survival analysis, selection issues, and endogeniety.

0101	Andrew Fenelon	Seats (Total: 20)
	M 4:00pm - 6:45pm	PLS 1146

HLSA798 **HLSA Journal Club**

Credits: 1 Grading Method: Sat-Fail, Audit

The course will highlight current topics in health services research. Outside speakers will present their research in a few of the classes. For the other classes, graduate students in the HLSA programs will select important and timely articles that they will present to the class for discussion in an informal setting.

0101	Jie Chen	Seats (Total: 15)
	Th 12:00pm - 1:00pm	Location: TBA

HLSA799 **Master's Thesis Research**

(Perm req)

Credits: 1-6

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

HLSA898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

HLSA899 **Doctoral Dissertation Research**

(Perm req)

Credits: 1-8

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

HLSC Integrated Life Sciences Spring 2019

HLSC322 **Principles of Genetics and Genomics**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HLSC207. Restriction: Must be in a major in UGST-HCOL-Integrated Life Sciences Program. Credit only granted for: HLSC322 or BSCI222.

Principles and mechanisms of heredity and gene expression, with a focus on the application of genomics to contemporary medicine, biotechnology, and societal issues.

0101	Kathryn Monzo TuTh 11:00am - 12:15pm Tu 2:00pm - 3:50pm	Seats (Total: 24) CCC 1205 LPA 1125	Discussion
0102	Kathryn Monzo TuTh 11:00am - 12:15pm W 5:00pm - 6:50pm	Seats (Total: 24) CCC 1205 LPA 0100	Discussion
0103	Kathryn Monzo TuTh 11:00am - 12:15pm Th 2:00pm - 3:50pm	Seats (Total: 24) CCC 1205 LPA 1125	Discussion
0104	Kathryn Monzo TuTh 11:00am - 12:15pm F 12:00pm - 1:50pm	Seats (Total: 24) CCC 1205 LPA 1125	Discussion

HLTH Health Spring 2019

HLTH124 **Introduction to Behavioral and Community Health**

Credits: 1 Grading Method: Regular, Audit

Restriction: Must be in a major within the SPHL-Behavioral & Community Health department.

Required of first semester Community Health majors to expose them to introductory-level concepts within the field of behavioral and community health as well as the Community Health degree program. Includes discussion on the delivery of behavioral and community health at the local, state, national, and global levels; career opportunities in the diverse sectors of the community health field; undergraduate programmatic information; and strategies for student success.

0101	M Reynolds	Seats (Total: 80)
	M 1:00pm - 1:50pm	TYD 2106

HLTH130 **Introduction to Public and Community Health**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

Restriction: Must not have completed HLTH105; and non-majors must have 45 or fewer credits. Credit only granted for: HLTH105 or HLTH130. Formerly: HLTH105.

An introduction to the theory and practice of public and community health. The influence of public health professionals on the past, present, and future health status of society through the examination of critical health issues will be described. Programming models, theories and policy development are included.

Attendence is expected on the first day of class. Restricted to majors or non-majors with less than or equal to 45 credits.

0101	Donna Howard	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	SPH 0302

HLTH140 **Personal and Community Health**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Meaning and significance of physical, mental and social health as related to the individual and to society; important phases of national health problems; constructive methods of promoting health of the individual and the community.

0101	Israel Abebe, Dana Reiss	Seats (Total: 200)
	TuTh 9:30am - 10:45am	SPH 1312

HLTH140H **Personal and Community Health**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Meaning and significance of physical, mental and social health as related to the individual and to society; important phases of national health problems; constructive methods of promoting health of the individual and the community.

0101	Dana Reiss, Israel Abebe	Seats (Total: 200)
	TuTh 9:30am - 10:45am	SPH 1312

HLTH200 **Introduction to Research in Community Health**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Community Health program.

An overview of specific components and steps involved in the community health research process. Content includes, foundations of research, sampling, measurement design, and analysis in a community context.

0101	Azieb Kidanu	Seats (Total: 75)
	MWF 2:00pm - 2:50pm	SPH 1303

HLTH230 **Introduction to Health Behavior**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

Prerequisite: Must have completed or be concurrently enrolled in HLTH130.

Psychological, social psychological, and sociological approaches to the following health areas: development of health attitudes and behavior, patient-provider interaction and the organization of health care.

Restricted to majors or non-majors with less than or equal to 45 credits. Students entering Fall 2018 or later: Prerequisite does not apply.

0101	Craig Fryer	Seats (Total: 75)
	MW 10:30am - 11:45am	CSI 3117

HLTH234 **Global Health Messages: Understanding Exposure & Impact.**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVCC, SCIS

Using a global perspective, this course teaches students to be critical consumers of current and historical health communication interventions. It also provides students with the skills to develop media interventions that target specific and general populations. Students will discover the array of diverse media messages that influence the health and well-being of individuals and communities.

0101	Dina Borzekowski Tu 3:30pm - 6:15pm	Seats (Total: 40) SPH 0308

HLTH264 **Tweets & Likes: Digital Health & Social Media**

Credits: 3 | Grading Method: Regular, Audit | General Education: DSHS, SCIS

Examines the current and potential use of digital health and social media to influence public health. Provides an overview of knowledge, skills and terminology necessary to optimize the effectiveness of these technologies to contribute to the enhancement of individual and community health.

0101	Robert Gold, Sandra Saperstein TuTh 2:00pm - 3:15pm	Seats (Total: 40) CSI 2120

HLTH285 **Controlling Stress and Tension**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE | General Education: DSHS

Health problems related to stress and tension. Analysis of causative psychosocial stressors and intervening physiological mechanisms. Emphasis on prevention and control of stress through techniques such as biofeedback, meditation and neuromuscular relaxation.

Restricted to majors or non-majors with less than or equal to 45 credits.

0101	Sharon Desmond TuTh 8:00am - 9:15am	Seats (Total: 56) SPH 1302

HLTH285H **Controlling Stress and Tension**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE | General Education: DSHS

Health problems related to stress and tension. Analysis of causative psychosocial stressors and intervening physiological mechanisms. Emphasis on prevention and control of stress through techniques such as biofeedback, meditation and neuromuscular relaxation.

0101	Sharon Desmond TuTh 8:00am - 9:15am	Seats (Total: 56) SPH 1302

HLTH289 **Topical Investigations**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Independent study by an individual student or an experimental course in special areas of knowledge not covered by regularly scheduled courses.

Contact department for information to register for this course.

HLTH298D **Special Topics in Health; African-American Health Disparities and Social Justice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as AASP298D and SOCY298D. Credit granted for AASP298D, HLTH298D or SOCY298D.

0101	Caryn Bell MW 2:00pm - 3:15pm	Seats (Total: 35) HBK 0105

HLTH300 **Biostatistics for Public Health Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR

Prerequisite: Must have completed or be concurrently enrolled in HLTH200. Restriction: Must be in Community Health program. Also offered as: EPIB300. Credit only granted for: EPIB300 or HLTH300.

An examination of biostatistical concepts and procedures as they relate to contemporary issues in public health. Focus on applications, hands-on-experience, and interpretations of statistical findings in public health research.

0201	Jing Zhang TuTh 11:00am - 11:50am M 4:00pm - 5:50pm	Seats (Total: 20) SPH 1312 SPH 0301	 Discussion
0202	Jing Zhang TuTh 11:00am - 11:50am F 12:00pm - 1:50pm	Seats (Total: 20) SPH 1312 SPH 0305	 Discussion

HLTH300H **Biostatistics for Public Health Practice**

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR

Prerequisite: Must have completed or be concurrently enrolled in HLTH200. Restriction: Must be in Community Health program. Also offered as: EPIB300. Credit only granted for: EPIB300 or HLTH300.

An examination of biostatistical concepts and procedures as they relate to contemporary issues in public health. Focus on applications, hands-on-experience, and interpretations of statistical findings in public health research.

0201	Jing Zhang TuTh 11:00am - 11:50am M 4:00pm - 5:50pm	Seats (Total: 20) SPH 1312 SPH 0301	Discussion
0202	Jing Zhang TuTh 11:00am - 11:50am F 12:00pm - 1:50pm	Seats (Total: 20) SPH 1312 SPH 0305	Discussion

HLTH301 **Epidemiology for Public Health Practice**

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HLTH300. Restriction: Must be in Community Health program. Also offered as: EPIB301. Credit only granted for: EPIB301 or HLTH301.

An examination of the discipline of epidemiology and its application to public health issues and practices, covering current epidemiological concepts and methods.

0201	Typhanye Dyer TuTh 2:00pm - 2:50pm M 10:00am - 10:50am	Seats (Total: 20) ESJ 0224 SPH 0302	Discussion
0202	Typhanye Dyer TuTh 2:00pm - 2:50pm M 3:00pm - 3:50pm	Seats (Total: 20) ESJ 0224 SPH 0303	Discussion

HLTH301H **Epidemiology for Public Health Practice**

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HLTH300. Restriction: Must be in Community Health program. Also offered as: EPIB301. Credit only granted for: EPIB301 or HLTH301.

An examination of the discipline of epidemiology and its application to public health issues and practices, covering current epidemiological concepts and methods.

0201	Typhanye Dyer TuTh 2:00pm - 2:50pm M 10:00am - 10:50am	Seats (Total: 20) ESJ 0224 SPH 0302	 Discussion
0202	Typhanye Dyer TuTh 2:00pm - 2:50pm M 3:00pm - 3:50pm	Seats (Total: 20) ESJ 0224 SPH 0303	 Discussion

HLTH302 **Measuring Change in Community Based Research**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in HLTH200 and EPIB301. Restriction: Must be in Community Health program.

Examination of research and evaluation tools that can be applied to community health promotion. Includes the application of qualitative research methods, community needs and strengths assessments, asset mapping, and monitoring and evaluating process, outcome and impact evaluation.

0101	Kirsten Stoebenau TuTh 3:30pm - 4:45pm	Seats (Total: 30) BPS 0283

HLTH352 **Portrayal of Drug Use and Addiction on Screen: Does Hollywood get it Right?**

Credits: 3 Grading Method: Regular, Audit

Through comparative analysis of public health research evidence with portrayals used in film, the student gains a deep understanding of substance abuse, its consequences, and theoretical foundations of its biopsychosocial etiology and radiating effects on families, communities and society.

0101	Amelia Arria TuTh 12:30pm - 1:45pm	Seats (Total: 25) SPH 0305

HLTH352H **Portrayal of Drug Use and Addiction on Screen: Does Hollywood get it Right?**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Through comparative analysis of public health research evidence with portrayals used in film, the student gains a deep understanding of substance abuse, its consequences, and theoretical foundations of its biopsychosocial etiology and radiating effects on families, communities and society.

0101	Amelia Arria	Seats (Total: 25)	
	TuTh 12:30pm - 1:45pm	SPH 0305	

HLTH364 **Social Media & Digital Tools for Community & Public Health**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Completion of HLTH230 with a C- or higher. Restriction: Must be in Community Health program; and must have earned a minimum of 30 credits.

Examination of the characteristics and uses of media platforms and digital technologies to expand the capability to identify and reduce community and public health risks at all levels of prevention. Also considered will be the potential threats these new media can play on individual choice, privacy, confidentiality, and social influence -- which themselves can pose health threats to community and public health.

Restricted to Community Health (08370) majors who entered the program in Fall 2018 or later.

0101	Robert Gold, Sandra Saperstein	Seats (Total: 50)	
	W 1:00pm - 4:00pm	SPH 0302	

HLTH366 **Behavioral and Community Issues in Public Health**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: HLTH130, HLTH230, PSYC100, SOCY100, SOCY105, or ANTH260. Restriction: Must be in Public Health Science program; or permission of SPHL-Behavioral & Community Health department. And must have earned a minimum of 45 credits. Additional information: This course will initially be restricted to Public Health Science (PHSC) majors, but could ultimately be opened to other majors, particularly those in HLTH.

The exploration of how social and behavioral science theories and public health concepts and methods can be applied to both the health-illness experience and community interventions.

0101	Evelyn King-Marshall	Seats (Total: 24)	
	MW 2:00pm - 2:50pm	SHM 2102	
	Tu 9:30am - 10:20am	SPH 0307	Discussion
	Restricted to Public Health Science students at College Park.		

0102	Evelyn King-Marshall MW 2:00pm - 2:50pm Tu 12:30pm - 1:20pm	Seats (Total: 24) SHM 2102 SPH 1302	Discussion
	Restricted to Public Health Science students at College Park.		
0103	Evelyn King-Marshall MW 2:00pm - 2:50pm W 9:00am - 9:50am	Seats (Total: 24) SHM 2102 SPH 0307	Discussion
	Restricted to Public Health Science students at College Park.		
0104	Evelyn King-Marshall MW 2:00pm - 2:50pm W 10:00am - 10:50am	Seats (Total: 24) SHM 2102 SPH 0307	Discussion
	Restricted to Public Health Science students at College Park.		
0105	Evelyn King-Marshall MW 2:00pm - 2:50pm W 11:00am - 11:50am	Seats (Total: 24) SHM 2102 SPH 0307	Discussion
	Restricted to Public Health Science students at College Park.		
0106	Evelyn King-Marshall MW 2:00pm - 2:50pm Th 9:30am - 10:20am	Seats (Total: 24) SHM 2102 SPH 0307	Discussion
	Restricted to Public Health Science students at College Park		
SG91	Chandria Jones Th 5:00pm - 7:30pm	Seats (Total: 30) BLD3 2226	
	Restricted to Public Health Science students at Shady Grove.		
SG92	Chandria Jones Th 5:00pm - 7:30pm	Seats (Total: 10) BLD3 2226	
	Restricted to CCJS students at Shady Grove.		

HLTH374 **Drugged, Drowsy & Distracted Driving: traffic safety issues for the new millenium**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in HLTH200 and HLTH300. Restriction: Must be in Community Health program.

An in-depth examination of the current status of research, historical trends and policies regarding impaired driving. Designed to provide exposure to the research process for understanding the behavioral factors that contribute to impaired driving in our society.

0101	Kenneth Beck M 4:00pm - 6:45pm	Seats (Total: 20) SPH 0303

HLTH374H **Drugged, Drowsy & Distracted Driving: traffic safety issues for the new millenium**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in HLTH200 and HLTH300. Restriction: Must be in Community Health program.

An in-depth examination of the current status of research, historical trends and policies regarding impaired driving. Designed to provide exposure to the research process for understanding the behavioral factors that contribute to impaired driving in our society.

0101	Kenneth Beck M 4:00pm - 6:45pm	Seats (Total: 20) SPH 0303

HLTH377 **Human Sexuality**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The biological and developmental aspects of human sexuality; the psychological and emotional aspects of sexual behavior; sexual identity; the historical, cultural, social, linguistic, legal and moral forces affecting sexual issues; the importance of communication, disclosure and intimacy in interpersonal relationships; and research trends in the area of human sexuality.

Restricted to students with greater than 60 credits.

0101	Jenna Messman MW 2:00pm - 3:15pm	Seats (Total: 200) KEY 0106

HLTH377H **Human Sexuality**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The biological and developmental aspects of human sexuality; the psychological and emotional aspects of sexual behavior; sexual identity; the historical, cultural, social, linguistic, legal and moral forces affecting sexual issues; the importance of communication, disclosure and intimacy in interpersonal relationships; and research trends in the area of human sexuality.

0101	Jenna Messman	Seats (Total: 200)
	MW 2:00pm - 3:15pm	KEY 0106

HLTH386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Permission of SPHL-Behavioral & Community Health department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

HLTH389 **Topical Investigations**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Independent study by an individual student or an experimental course in special areas of knowledge not covered by regularly scheduled courses.

Contact department for information to register for this course.

HLTH391 **Making a Difference: Applying Community Health**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: SPHL100, HLTH124, HLTH140, HLTH200, HLTH230, and EPIB301; and must have completed or be concurrently enrolled in HLTH302 and EPIB315. Restriction: Must be in Community Health program.

The exploration and application of community health concepts including theoretical models, advocacy, cultural competency, asset mapping, and needs assessment. Includes planning, implementing and evaluating a community health program with a designated community partner.

0101	James Butler	Seats (Total: 65)
	MW 11:00am - 12:15pm	TYD 2106

HLTH391H **Making a Difference: Applying Community Health**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: SPHL100, HLTH124, HLTH140, HLTH200, HLTH230, and EPIB301; and must have completed or be concurrently enrolled in HLTH302 and EPIB315. Restriction: Must be in Community Health program.

The exploration and application of community health concepts including theoretical models, advocacy, cultural competency, asset mapping, and needs assessment. Includes planning, implementing and evaluating a community health program with a designated community partner.

0101	James Butler MW 11:00am - 12:15pm	Seats (Total: 5) TYD 2106

HLTH420 **Effective Strategies for Public Health Practice**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSOC

Prerequisite: Minimum grade of C- in HLTH301 and HLTH391. Corequisite: HLTH490.

The purpose of this course is to present the interrelationships of curriculum planning, methodology and the selection and use of successful public health presentation strategies. Special problems associated with public health presentations are discussed, and students become familiar with a variety of resources as well as with planning for and implementing demonstration presentations.

0101	M Reynolds TuTh 9:30am - 10:45am	Seats (Total: 18) SPH 0303
0201	M Reynolds TuTh 11:00am - 12:15pm	Seats (Total: 18) SPH 0303
0301	M Reynolds TuTh 12:30pm - 1:45pm	Seats (Total: 18) SPH 0303

HLTH424 **Lesbian, Gay, Bisexual & Transgender Health**

Credits: 3 Grading Method: Regular, Audit

Recommended: Students should have some familiarity with basic psychology, sociology and/or epidemiology. Restriction: This course is restricted to students who have completed a minimum of 60 credits. Also offered as: HLTH624. Credit only granted for: HLTH424 or HLTH624.

The preparation of students to be knowledgeable advocates for the health of lesbian, gay, bisexual, and transgender (LGBT) populations. Course focus is defined by the Healthy People 2020 federal health objectives for LGBT populations: data collection for research, culturally competent healthcare, bullying in schools, suicide, homelessness, and sexually transmitted diseases including HIV.

0101	Bradley Boekeloo Th 4:00pm - 6:45pm *Only for HLTH students.*	Seats (Total: 20) SPH 0302

0201	Bradley Boekeloo Th 4:00pm - 6:45pm *Only for PHSC students.*	Seats (Total: 20) SPH 0302

HLTH424H **Lesbian, Gay, Bisexual & Transgender Health**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Recommended: Students should have some familiarity with basic psychology, sociology and/or epidemiology. Restriction: This course is restricted to students who have completed a minimum of 60 credits. Also offered as: HLTH624. Credit only granted for: HLTH424 or HLTH624.

The preparation of students to be knowledgeable advocates for the health of lesbian, gay, bisexual, and transgender (LGBT) populations. Course focus is defined by the Healthy People 2020 federal health objectives for LGBT populations: data collection for research, culturally competent healthcare, bullying in schools, suicide, homelessness, and sexually transmitted diseases including HIV.

0101	Bradley Boekeloo Th 4:00pm - 6:45pm	Seats (Total: 20) SPH 0302
0201	Bradley Boekeloo Th 4:00pm - 6:45pm	Seats (Total: 20) SPH 0302

HLTH430 **Health Education in the Workplace**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A survey of the role of health education in work settings. Examination of occupational stress, the health effects of shift work, women's health in the workplace, health education approaches to informing workers and management, and health promotion programs in the workplace.

0101	Robert Feldman W 4:00pm - 6:45pm	Seats (Total: 45) SPH 1302

HLTH434 **Introduction to Public Health Informatics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in one of the following programs (Community Health; Public Health Science) ; and must have earned a minimum of 60 credits. Credit only granted for: HLTH434 or HLTH498E. Formerly: HLTH498E.

Provides an overview of the field of public health informatics and the influence of technology on the public's health and well-being. Emphasizes the application of various technologies and computer/internet applications to support public health research and practice, including strategies to address new and emerging threats.

SG91	Sandra Saperstein Th 9:30am - 12:00pm	Seats (Total: 35) BLD3 2133

HLTH471 **Women's Health**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Restriction: Must be in a major within the SPHL-Behavioral & Community Health department; or must be in a major within the ARHU-Women's Studies department. Also offered as: WMST471. Credit only granted for: HLTH471 or WMST471.

The historical, physiological, psychological, and sociological mechanisms which contribute to women's health. Topics will include gynecological concerns and reproductive health; nutrition, exercise; violence; substance use/abuse; and the health of special populations.

Restriction: Must be in a major within SPHL-Behavioral & Community Health department; or must be in a major within ARHU-Women's Studies department. Also offered as WMST471. Credit granted for HLTH471 or WMST471.

0101	Kirsten Stoebenau MWF 10:00am - 10:50am *Restriction: Must be a major in Behavioral and Community Health department; or must be in a major within ARHU-Women's Studies department.*	Seats (Total: 30) SPH 1303
0201	Kirsten Stoebenau MWF 10:00am - 10:50am *Restriction: Must be a Public Health Science major.*	Seats (Total: 45) SPH 1303

HLTH489 **Field Laboratory Projects and Workshop**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

A course designed to meet the needs of persons in the field with respect to workshop and research projects in special areas of knowledge not covered by regularly structured courses.

Contact department for information to register for this course.

HLTH490 **Professional Preparation in Community Health**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in HLTH391, BSCI170, BSCI171, and BSCI201. Corequisite: HLTH420. Restriction: Must be in Community Health program.

The development of skills necessary for joining the public health work force post-graduation, as well as assistance in obtaining an appropriate internship that will serve as a final semester, capstone experience. Students will be exposed to various relevant professional experiences, and will be afforded the opportunity to strengthen their own individual skills by selecting from a menu of skills-based learning modules that best suit their perceived needs.

0201	Tracy Zeeger TuTh 11:00am - 12:15pm	Seats (Total: 28) SPH 0308
0301	Tracy Zeeger MW 9:30am - 10:45am	Seats (Total: 28) CCC 1100

HLTH491 **Community Health Internship**

(Perm req)

Credits: 12 Grading Method: Regular

Prerequisite: Must have completed HLTH490 with a C- or higher. Restriction: Must have completed all program requirements and be in the last semester of the Community Health degree program.

Integrating theory with practice in a community health setting.

First class will meet on January 30th from 8:30am-1:00pm, location TBA. Class seminars will meet 6 times during the semester. Dates, times, and locations TBA.

0101	Tracy Kennedy W 12:00pm - 2:50pm Contact instructor or department for details.	Seats (Total: 75) Location: TBA
SA02	Tracy Kennedy **Meets February 14, 2019 - May 11, 2019** Contact instructor or department for details.	Seats (Total: 0)

HLTH498L **Special Topics in Health; Health Literacy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest in areas not covered by regularly scheduled courses.

0101	Heather Platter MW 2:00pm - 3:15pm	Seats (Total: 35) PHY 1204

HLTH609 **Public Health Journal Club**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Includes discussion of recent literature from leading peer-reviewed journals on a specific psychosocial construct and health outcome, with students presenting two articles during the semester. The purpose of this course is to read and consider health constructs and outcomes from a multidisciplinary perspective.

0101	Craig Fryer	Seats (Total: 10)
	Contact instructor or department for details.	

HLTH624 **Advanced Lesbian, Gay, Bisexual & Transgender Health**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Recommended: Students should have some familiarity with basic psychology, sociology and/or epidemiology. Credit only granted for: HLTH424 or HLTH624.

The preparation of students to be knowledgeable advocates for the health of lesbian, gay, bisexual, and transgender (LGBT) populations. Course focus is defined by the Healthy People 2020 federal health objectives for LGBT populations: data collection for research, culturally competent healthcare, bullying in schools, suicide, homelessness, and sexually transmitted diseases including HIV.

0101	Bradley Boekeloo	Seats (Total: 5)
	Th 4:00pm - 6:45pm	SPH 0302

HLTH625 **Community Assessment through Qualitative Methods**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Course will be restricted to Behavioral and Community Health graduate students.

A discussion of major paradigms in qualitative inquiry, an overview of the process of qualitative research, and an introduction to several qualitative research methods, including grounded theory, ethnography, phenomenology, and content analysis. Students will collect, transcribe, analyze, and present qualitative data using introductory interview and analytic techniques.

0101	Elizabeth Aparicio	Seats (Total: 25)
	Tu 4:00pm - 6:45pm	SPH 0302

HLTH653 **Quantitative Research Methods II in Public Health**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: HLTH652. Restriction: Must be in a major within SPHL-Behavioral & Community Health department. Credit only granted for: HLTH653 or HLTH688T. Formerly: HLTH688T.

Intermediate and advanced statistics and procedures in health-related research for doctoral students with the focus on applications of these statistical methodological methods to public health research.

0101	Min Wang M 4:00pm - 6:45pm	Seats (Total: 10) PLS 1172

HLTH665 Health Behavior I

Credits: 3 Grading Method: Regular, Audit

The psychological, social psychological, and sociological theories of health behavior. The relation of health knowledge, beliefs, attitudes, intentions, and behavior to preventive, illness, sick-role, and health utilization behaviors.

0101	Donna Howard Th 4:00pm - 6:45pm	Seats (Total: 25) SPH 0308
PLH1	Katherine Sharp Class time/details on ELMs	Seats (Total: 20) ONLINE

Must be in Public Health Policy & Practice Program. For permission to enroll, contact oes@umd.edu.

HLTH671 Public Health Communication

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Non-SPH students must obtain permission from the instructor prior to registering. Credit only granted for: HLTH670 or HLTH671 and HLTH672. Formerly: HLTH670.

An exploration of the the broad and diverse field of health communication including medical encounters, everyday communication about health, advertising, news, public health campaigns, community outreach, public policy, and international programs. Theories and applied efforts that have been studied and documented will be examined.

0101	Devlon Jackson W 4:00pm - 6:45pm	Seats (Total: 12) SPH 0307

HLTH688 Special Problems in Health Education

(Perm req)

Credits: 1-6

Grading Method: Regular, Audit

Contact department for information to register for this course.

HLTH711 **Advanced Research Methods in Health**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: HLTH710. Restriction: Must be in MPH: Community Health Education (Master's) program; or must be in Ph.D.: Public and Community Health (Doctoral) program.

Quantitative techniques, advanced research methods and design issues.

0101	Kerry Green	Seats (Total: 10)
	Th 4:00pm - 6:45pm	PLS 1158

HLTH780 **Community Health**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: HLTH740 or HLTH780.

Overview of public health organizations, programs, and policies, including their structure and function, and their ability to change with changing community health needs.

For CHED and PCHL majors only.

A Partnership for Action Learning in Sustainability (PALS) course where students apply classroom learning to actual community needs.

0101	Sharon Desmond	Seats (Total: 25)
	M 4:00pm - 6:45pm	SPH 0302

HLTH785 **Internship in Public Health**

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: HLTH665, HLTH775, and HLTH780; or permission of SPHL-Behavioral & Community Health department. Credit only granted for: HLTH785 or HLTH778.

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

This course has three in-person seminar dates: January 28th, March 5th and May 13th from 7-9pm in SPH 1234A.

0101	Tracy Zeeger	Seats (Total: 15)
	Meets January 28, 2019 - May 3, 2019	
	M 7:00pm - 9:00pm	SPH 1234A
	Contact instructor or department for details.	

HLTH786 **Capstone Project in Public Health**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed all required coursework; and permission of SPHL-Behavioral & Community Health department. Restriction: Must be in a major within SPHL-Behavioral & Community Health department.

Capstone experience providing opportunity to apply knowledge and skills to a specific public health problem or issue. Completion of project relevant to public health under the direction of an advisor.

Contact department for information to register for this course.

HLTH799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

HLTH898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

HLTH899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

HONR Honors Spring 2019

HONR208D **Honors Seminar; Insect Biodiversity: The Good, the Bad, and the Weird**

Credits: 3 Grading Method: Regular General Education: DSNS

0101	William Lamp	Seats (Total: 16)
	MW 11:00am - 12:15pm	PLS 1161

HONR208L **Honors Seminar; Justice Matters: Law, Literature, and Film**

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

0101	Sara Schotland TuTh 11:00am - 12:15pm	Seats (Total: 20) ESJ B0320

HONR209G Honors Seminar; Elements of Drawing for Non-Majors

Credits: 3 Grading Method: Regular General Education: DSSP

Students must pay a $40.00 studio lab fee.

0101	Patrick Craig TuTh 12:30pm - 3:00pm *There is a $40.00 lab fee for this course.*	Seats (Total: 16) ASY 2315

HONR209W Honors Seminar; War Stories: Personal Narratives, Fiction, and Film

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

0101	Sara Schotland Tu 2:00pm - 4:30pm	Seats (Total: 20) PLS 1158

HONR218J Honors Seminar; Sustainability and Development: From the Individual to the Global

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

0101	Dorith Grant-Wisdom TuTh 11:00am - 12:15pm	Seats (Total: 20) TWS 1313

HONR218M Honors Seminar; Elements of Music Composition for Non-Majors

Credits: 3 Grading Method: Regular General Education: DSSP

0101	William Evans Tu 2:00pm - 4:30pm	Seats (Total: 18) PAC 1108

HONR218P Honors Seminar; Immigration: Personal Stories and Policy Changes

Credits: 3 Grading Method: Regular General Education: DSHU, DVUP, SCIS

0101	Sara Schotland	Seats (Total: 20)
	Th 2:00pm - 4:30pm	CHE 2140

HONR218T **Honors Seminar; Political Theater: On Stage and in Washington**

Credits: 3 Grading Method: Regular General Education: DSHU

Students must contribute $20.00 toward theater ticket purchases.

0101	Nelson Pressley	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ANA 0120

HONR218W **The Idea of Crime**

Credits: 3 Grading Method: Regular CORE: SB General Education: DSHS, SCIS

0101	John Laub	Seats (Total: 20)
	M 2:00pm - 4:30pm	LEF 2165E

HONR218Y **Honors Seminar; How to Think like Leonardo, Montaigne, and Shakespeare**

Credits: 3 Grading Method: Regular General Education: DSHU

0101	Gerard Passannante	Seats (Total: 20)
	MW 2:00pm - 3:15pm	ASY 3203

HONR219M **Honors Seminar; Why Do We Do What We Do? The Role of Motivation in People's Achievements and Choices**

Credits: 3 Grading Method: Regular General Education: DSHS

0101	Allan Wigfield	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ASY 3221

HONR219T **Honors Seminar: Surviving Natural Disasters: Learning from Hurricane Katrina, Big Earthquakes, and Other Natural Hazards**

Credits: 3 Grading Method: Regular CORE: IE General Education: DSSP, SCIS

0101	Lewis Link	Seats (Total: 20)
	M 2:00pm - 4:30pm	MTH 0402

0201	Lewis Link	Seats (Total: 20)
	M 11:00am - 1:30pm	HBK 0108

HONR219Z **Honors Seminar; Apocalypse Then and Now: World Traditions of the End Times**

Credits: 3 Grading Method: Regular General Education: DSHU

0101	John Carlson	Seats (Total: 20)
	Tu 7:00pm - 9:30pm	LPA 0124
0201	John Carlson	Seats (Total: 20)
	W 7:00pm - 9:30pm	LPA 0124

HONR228N **Alleviating Poverty in Developing Countries: The Economics and Challenges of Development Programs**

Credits: 3 Grading Method: Regular CORE: SB, D General Education: DSHS

0101	Snaebjorn Gunnsteinsson	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ESJ 1309

HONR228T **Honors Seminar; Journalism and Peace**

Credits: 3 Grading Method: Regular

0101	Colman McCarthy	Seats (Total: 20)
	M 12:00pm - 2:30pm	ANA 0120

HONR229C **Honors Seminar; Contemporary American Culture as Seen from Abroad: A Transatlantic Seminar**

Credits: 3 Grading Method: Regular General Education: DSHU

0101	Nicole Hirschfelder	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	TWS 3136

HONR229K **Honors Seminar; Achieving Justice and Equality in the 21st Century: Problems, Policies and Practices**

Credits: 3 Grading Method: Regular General Education: DSHS, DVUP, SCIS

0101	Cecily Hardaway	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	TWS 1313

HONR229R **Honors Seminar; Short Texts, Great Ideas: The Essay Form**

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

0101	Gregory Bucher	Seats (Total: 20)
	MW 2:00pm - 3:15pm	LEF 1201

HONR229W **Honors Seminar; Revenge of the Funny Women**

Credits: 3 Grading Method: Regular General Education: DSHU, DVUP

0101	Heidi Scott	Seats (Total: 20)
	MWF 12:00pm - 12:50pm	JMZ 0118

HONR238C **The Future of Energy and Climate Policy**

Credits: 3 Grading Method: Regular CORE: IE General Education: DSSP

0101	Tyson Slocum	Seats (Total: 20)
	W 3:00pm - 5:30pm	ESJ 1309

HONR238G **Honors Seminar; The Manhattan Project: A Century of Radioactivity, Nuclear Weapons, and Nuclear Power**

Credits: 3 Grading Method: Regular General Education: DSNS, SCIS

0101	William Walters	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	MTH 0402

HONR238V **Honors Seminar; Professionally Essential: Analysis and Visualization Skills in the Era of Big Data**

Credits: 3 Grading Method: Regular General Education: DSSP

0101	Patrick Killion	Seats (Total: 20)
	M 2:00pm - 4:30pm	ATL 2339

HONR238Z **Honors Seminar; .Gladiators and Caesars: The Archaeology of Roman Spectacle**

Credits: 3 Grading Method: Regular General Education: DSHU

0101	Maryl Gensheimer	Seats (Total: 20)
	M 2:00pm - 4:30pm	ASY 4213

HONR239B **Honors Seminar: New York City and the American Dream**

Credits: 3 | Grading Method: Regular | CORE: HL | General Education: DSHU, DVUP

0101	Ingrid Satelmajer	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	KNI 1105

HONR239C **Honors Seminar: The Creative Process in Dance**

Credits: 3 | Grading Method: Regular | CORE: HA, D | General Education: DSHU

0101	Alvin Mayes	Seats (Total: 15)
	MW 11:00am - 12:15pm	PAC 1912

HONR239F **Honors Seminar: Plants and Empires: Historical Consequences and Contemporary Issues**

Credits: 3 | Grading Method: Regular | CORE: LS | General Education: DSNS, SCIS

0101	Todd Cooke	Seats (Total: 20)
	TuTh 9:30am - 10:45am	HJP 1216

HONR239G **Honors Seminar; We, the Readers: American Literature for an American Democracy**

Credits: 3 | Grading Method: Regular | General Education: DSHU, SCIS

0101	Robert Chiles	Seats (Total: 20)
	Th 6:00pm - 8:30pm	KEY 0121

HONR239J **Honors Seminar; "Enemy of the People": When Journalism Investigates the Powerful**

Credits: 3 | Grading Method: Regular | General Education: DSHS, SCIS

Credit will only be granted for HONR239J or JOUR289P.

0101	Mark Feldstein	Seats (Total: 20)
	M 2:00pm - 4:30pm	TWS 1313

HONR239K **Honors Seminar; The Multicultural Metropolis**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

0101	Willow Lung Amam W 2:00pm - 4:30pm	Seats (Total: 20) KNI 1105

HONR239W **Honors Seminar; The Syrian Civil War**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

0101	David Cunningham TuTh 12:30pm - 1:45pm	Seats (Total: 20) TYD 1114

HONR248G **Honors Seminar; The Origins and Ramifications of Sex and Sexes**

Credits: 3 Grading Method: Regular General Education: DSNS, DVUP, SCIS

0101	Eric Haag TuTh 9:30am - 10:45am	Seats (Total: 20) BPS 2249

HONR248J **Honors Seminar; A Most Human Nation**

Credits: 3 Grading Method: Regular General Education: DSHU, DVUP, SCIS

Students who have taken HHUM205 should contact the instructor for permission.

0101	Ingrid Satelmajer TuTh 2:00pm - 3:15pm	Seats (Total: 20) TWS 1313

HONR249B **Honors Seminar; London and British Empire**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

HONR249L **The Historical Development of London**

Credits: 3 Grading Method: Regular CORE: SH

Contact department for information to register for this course.

HONR258Z **Honors Seminar; Language, Identity, and Diversity in the U.S.**

Credits: 3 Grading Method: Regular General Education: DSSP, DVUP

Credit will only be granted for HONR258Z or SLLC305.

0101	Alene Moyer	Seats (Total: 20)
	TuTh 9:30am - 10:45am	JMZ 0120

HONR259W **Honors Seminar; Musical Migrations: Performance, Politics, and the Kurt Weill Festival**

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

0101	Craig Kier, Edward Maclary	Seats (Total: 20)
	TuTh 9:30am - 10:45am	PAC 3168

HONR268Z **Honors Seminar; Catastrophic Animal and Human Disease Outbreaks: What Else Can We Do To Prevent Them?**

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

Credit may only be granted for HONR268Z or ANSC277.

0101	Nathaniel Tablante	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ESJ 1309

HONR269C **Honors Seminar; Digital Dialogues and the Dynamics of Intercultural Communication**

Credits: 3 Grading Method: Regular General Education: DVCC

0101	Sahar Khamis	Seats (Total: 20)
	Tu 4:00pm - 6:30pm	WDS 1114

HONR269E **Honors Seminar; Exploring Key Issues of Globalization and Resistance**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

0101	Dorith Grant-Wisdom	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	TWS 1320

HONR269G **Honors Seminar; Hungry, Hot and Crowded: Global Challenges in the 21st Century**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Credit granted only for HONR269G or HONR229A.

0101	Kathleen Mogelgaard W 6:00pm - 8:30pm	Seats (Total: 20) KEY 0117

HONR269I **Honors Seminar; To the Moon and Back: The Apollo Program**

Credits: 3 Grading Method: Regular General Education: DSHS

0101	Douglas Oard TuTh 5:00pm - 6:15pm	Seats (Total: 20) ESJ 1309

HONR269L **Honors Seminar; Cracking the Secrets of the Universe Using Computers: Re-discovering the Higgs & Searching for Invisible Matter-Part II**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSNS, DSSP, SCIS

The second part of a two-semester Honors research seminar. Part one of this series was offered in the Fall 2018 semester. For permission to enroll, please contact Dr. Shabnam Jabeen at Jabeen@umd.edu.

0101	Shabnam Jabeen, Sarah Eno TuTh 11:00am - 12:15pm	Seats (Total: 20) PHY 3301

HONR269T **Honors Seminar: Understanding U.S. Foreign Policy toward Afghanistan**

Credits: 3 Grading Method: Regular CORE: SB, D General Education: DSHS, SCIS

0101	Temim Nusraty Th 6:30pm - 9:00pm	Seats (Total: 10) ANA 0120
	This is a Global Classroom course. There will be approximately 4 or 5 weeks where this course will meet on Sundays for teleconferencing meetings with students in Kabul, Afghanistan instead of meeting at its normal weekly time on Thursday nights (exact dates TBA).	

HONR278D **Honors Seminar; National Security Dilemmas**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

0101	Daniel Rosenthal M 7:00pm - 9:45pm	Seats (Total: 20) TWS 1320

HONR278G Honors Seminar; Exploring How Foreign Policy is Developed

Credits: 3 Grading Method: Regular General Education: DSHS

0101	Temim Nusraty M 6:30pm - 9:00pm	Seats (Total: 20) ANA 0120

HONR279T Honors Seminar; Google and Sudoku, Museums and Maps: Graph Theory for the Real World

Credits: 3 Grading Method: Regular General Education: FSAR

0101	Wiseley Wong MWF 12:00pm - 12:50pm	Seats (Total: 20) MTH B0425

HONR288E Honors Seminar; Cyberwar: Technology and Strategy Challenges

Credits: 3 Grading Method: Regular General Education: DSSP

0101	Brian David Mussington TuTh 12:30pm - 1:45pm	Seats (Total: 20) LEF 1171

HONR288O Honors Seminar: Why Do Things Fail?

Credits: 3 Grading Method: Regular CORE: PS General Education: DSNS, SCIS

This course is open only to non-engineering majors.

0101	Timothy Foecke MWF 1:00pm - 1:50pm	Seats (Total: 20) PHY 4222

HONR289A The Ecology and Evolutionary Biology of Infectious Disease

Credits: 3 Grading Method: Regular CORE: LS General Education: DSNS

0101	Benjamin Rosenthal Tu 4:30pm - 7:00pm	Seats (Total: 20) HBK 0125

HONR289P **Honors Seminar; How Do Innovators Think?**

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

Credit only granted for BMGT289B or HONR289P. Course will meet 4 times on Monday evenings for assessments and guest speaker presentations.

0101	Mark Wellman W 3:00pm - 4:50pm M 6:30pm - 9:15pm	Seats (Total: 20) VMH 3330H VMH 1212

HONR289V **Honors Seminar; Mars Exploration: Past, Present, Future**

Credits: 3 Grading Method: Regular General Education: DSNS, SCIS

0101	Douglas Hamilton M 2:00pm - 4:30pm	Seats (Total: 20) ATL 0201

HONR298F **Honors Seminar; Explaining Social Change: Fact and Fiction in Understanding Why our World Looks the Way it Does**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

0101	Meyer Kestnbaum TuTh 11:00am - 12:15pm	Seats (Total: 20) TWS 1321

HONR298J **Honors Seminar; A Century of Smashing Atoms: Particle Accelerators, the Engines of Discovery**

Credits: 3 Grading Method: Regular General Education: DSNS, SCIS

0101	Timothy Koeth TuTh 12:30pm - 1:45pm	Seats (Total: 20) PLS 1146

HONR298P **Honors Seminar; The Science of Happiness**

Credits: 3 Grading Method: Regular General Education: DSSP

0101	Alexandra Bely TuTh 11:00am - 12:15pm	Seats (Total: 20) BPS 2249

HONR299K **Honors Seminar; Global Governance or World Government?**

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

0101	Kate Seaman Tu 2:00pm - 4:30pm	Seats (Total: 20) MOR 1101

HONR299Q **Honors Seminar; Quantum Mechanics: Entangled and Uncertain**

Credits: 3 Grading Method: Regular

This course will not count for or substitute any PHYS course. Before registering for this course, students should carefully review the course description.

0101	William Dorland MW 7:00pm - 8:15pm	Seats (Total: 20) PHY 3301

HONR348L **Advanced Honors Seminar; Literature of London**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A series of seminars, often interdisciplinary and sometimes team taught The subjects will vary from semester to semester.

Contact department for information to register for this course.

HONR348M **Advanced Honors Seminar; Stock Market**

Credits: 3 Grading Method: Regular General Education: DSHS, DSSP, SCIS

A series of seminars, often interdisciplinary and sometimes team taught The subjects will vary from semester to semester.

0101	David McCandlish, Eric Wish Th 2:00pm - 5:00pm	Seats (Total: 20) ANA 0120

HONR349V **Honors Colloquium; Dubai: Global Immersion Experience**

Credits: 3 Grading Method: Regular

A series of seminars, often interdisciplinary and sometimes team taught. Subjects may vary.

Contact department for information to register for this course.

HONR358B **Honors Practicum**

(Perm req)

Credits: 3 Grading Method: Sat-Fail

For student section leaders of HONR100 or HONR200.

Contact department for information to register for this course.

HONR358C **Honors Practicum**

(Perm req)

Credits: 3 Grading Method: Sat-Fail

For student section leaders of HONR100 or HONR200.

Contact department for information to register for this course.

HONR359B **Honors Workshop; Alternatives to Violence**

Credits: 3 Grading Method: Sat-Fail

Honors workshops are small seminar classes which concentrate on skill development.

0101	Colman McCarthy	Seats (Total: 20)
	M 2:30pm - 5:00pm	ANA 0120

HONR359D **Honors Workshop; Honors Teaching Assistanship**

Credits: 3 Grading Method: Sat-Fail

Honors workshops are small seminar classes which concentrate on skill development.

Contact department for information to register for this course.

HONR359X **Honors Workshop**

Credits: 1 Grading Method: Sat-Fail

Honors workshops are small seminar classes which concentrate on skill development.

Contact department for information to register for this course.

HONR378P **Advanced Honors Seminar; Elements of Music Composition for Non-Majors II**

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSSP

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Prerequisite: HONR218M. Permission of instructor required.

0101	William Evans	Seats (Total: 18)
	Tu 5:30pm - 8:00pm	PAC 1108

HONR379 **Honors Independent Study**

(Perm req)

Credits: 3 Grading Method: Regular

Involves reading or research directed by individual faculty, especially in areas outside of the student's major. Open only to University honors students.

Available only to University honors students.

Contact department for information to register for this course.

HONR379A **Honors Independent Study**

Credits: 1-6 Grading Method: Regular

Involves reading or research directed by individual faculty, especially in areas outside of the student's major. Open only to University honors students.

Contact department for information to register for this course.

HONR379W **Honors Independent Study; Writing Internship: Maryland General Assembly Pre-Professional Writing Internship**

(Perm req)

Credits: 6 Grading Method: Regular General Education: DSSP

Involves reading or research directed by individual faculty, especially in areas outside of the student's major. Open only to University honors students.

Prerequisite: permission of department and completion of either ENGL381 or HONR368A. Also offered as ENGL388M. Credit granted for ENGL388M or HONR379W.

0101	Thomas Lowderbaugh	Seats (Total: 15)
	Contact instructor or department for details.	
	Students can only register for six credits.	

HONR388 **Honors Thesis or Project**

(Perm req)

Credits: 3 Grading Method: Regular

Contact department for information to register for this course.

IDEA Academy for Innovation & Entrepreneurship Spring 2019

IDEA247 **Introduction to Peer Innnovation Coaching**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Restriction: Sophomore standing or higher; and permission of Academy for Innovation and Entrepreneurship. Credit only granted for: IDEA247 or IDEA250. Formerly: IDEA250. Additional information: Participation in the course requires students to submit an application, be interviewed and selected by the Academy for Innovation and Entrepreneurship.

Prepares you as an Academy for Innovation and Entrepreneurship Peer Innovation Coach (PIC), where you will be coaching and guiding student teams in the classroom as they experiment with using the design thinking process. You will first have the opportunity to sharpen your own understanding of the design thinking process by applying it to a team design challenge, as well as further explore each step through readings, discussion and reflection. You will then focus on the concept of creativity and learning about the mindsets that are conducive to innovation. Towards the end of the semester, you will focus on the theories and methods related to effective coaching. Throughout the course, you will observe and practice coaching alongside AIE Facilitators as they teach design thinking modules in various courses across campus. As you get more familiar and comfortable with the design thinking curriculum, you will have the opportunity to facilitate parts of classes or activities at some of our workshops and special events, such as departmental/campus-wide design challenges.

Contact department for information to register for this course.

IDEA258D **Special Topics in Innovation; Explorations in Design**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics in innovation

Explorations in Design will give students the opportunity to apply their unique backgrounds to the realm of design. Students will engage in hands-on learning with real clients from various industries. We will explore how good and bad design plays a role in our everyday lives, from the way we order coffee to the logos you see to the signs that help you navigate (or get lost on) the metro.

0101	Meenu Singh	Seats (Total: 25)
	Th 12:00pm - 1:30pm	ESJ 2101

IDEA258Z **Special Topics in Innovation**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics in innovation

Students will be introduced to user-centric design processes for creating their own websites and apps. They will get to learn about design processes, techniques, and tools, which they will use to ultimately create their own digital product.

0101	Meenu Singh	Seats (Total: 20)
	Tu 5:00pm - 6:30pm	ESJ 2101

IDEA369 **Peer Innovation Coaching**

(Perm req)

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Deepen your role as an Academy for Innovation and Entrepreneurship Peer Innovation Coach (PIC), where you will be coaching and guiding student teams in the classroom as they learn to use innovation methods. There is both an experiential component and a classroom component. The experiential component involves coaching and teaching innovation class sessions throughout campus, and the classroom component involves discussions, reflection assignments and scenario role-playing to help improve your coaching and teaching. While some of the content in the classroom component will be seeded by a set of course readings, much of it will also be seeded by your own experiences in the experiential component.

Contact department for information to register for this course.

IDEA379A **Advanced Topics in Innovation; Design Your Purpose**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Advanced topics in innovation

Contact department for information to register for this course.

IDEA489 **Learning Experience Design Studio**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Deconstruct the elements of a learning experience and consider each as a variable to experiment with in your teaching as a student-teacher. You will also have the opportunity to share and discuss your teaching experiences with fellow student-teachers.

0101	Meenu Singh	Seats (Total: 6)
	W 5:00pm - 6:30pm	ESJ 2101

IDEA498 **Independent Study: Experiments in Innovation**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Apply design thinking and/or lean startup concepts to your own real-world project, which may involve a partner organization. This course requires a high degree of self-direction in all aspects of the project including defining specific milestones and deliverables. There will be regular coaching from an Academy for Innovation and Entrepreneurship team member.

Contact department for information to register for this course.

IMMR Immigration Studies Spring 2019

IMMR399 **Internship in Immigration/Migration Studies**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail

Internship experience with an organization that works with or studies migration or immigrant populations. This experiential learning course provides training that enriches the students' academic field of study and the IMMR transcript notation. Students submit a final written report of how the experience ties into their major field of study.

Restriction: Permission of IMMR department; and junior standing or higher. The Immigration and Migration Studies Internship program. Pre-professional experience in migration studies research, analysis, and writing in a variety of work settings. Contact department for information to register at globalmigration@umd.edu.

0101	Katarina Keane	Seats (Total: 1)
	Contact instructor or department for details.	

IMMR400 **Vital Voices: Oral Histories of the Immigrant Experience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: HIST222; or IMMR200. Credit only granted for: HIST428N, IMMR400, THET428I, or THET498V.. Formerly: HIST428N.

An exploration of the dynamic subject of U.S. immigrant experience through the scope of individual immigrant life stories in a global context. Course will include an overview of U.S. and global immigration patterns and an introduction to the practice of oral history.

0101	Robert Chiles	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	TLF 1103

INAG Institute of Applied Agriculture Spring 2019

INAG099 **Cooperative Education**

(Perm req)

Credits: 0 Grading Method: Sat-Fail

Restriction: Co-op is open to sustainable agriculture and agricultural business management students who have completed a minimum of 45 credit hours, have a minimum GPA of 2.0, and have advisor's permission. Students must pay a $250.00 lab fee. Cooperative Education, the culminating 22-week field experience in your program, is a collaborative partnership between the Institute of Applied Agriculture and the employer to provide a quality academic and practical training for students. Each student's co-op will vary according to the unique career direction the student wishes to pursue and is intended to accompany seminars and activities previously acquired in the IAA program. Upon completion of the course, students will have established contacts in the industry and substantial documentation to develop a personal portfolio.

0101	Meredith Epstein	Seats (Total: 15)
	Contact instructor or department for details.	

INAG101 **Computer Applications**

Credits: 3 Grading Method: Regular, Audit

Restricted to students in the AGNR-Institute of Applied Agriculture department. Others by permission of the AGNR-Institute of Applied Agriculture department. An up-to-date introduction to the use of computers on campus and in the agricultural industry. Exposure will be given to operating systems, storage media, networking, multimedia, and current hardware. Hands-on applica;tions with computers will cover windows operating system, word processing, spreadsheets and networking.

0101	Roy Walls	Seats (Total: 20)
	MW 10:00am - 11:50am	ANS 0509

INAG103 **Agricultural Marketing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-Institute of Applied Agriculture department. Additional information: Priority in enrollment will be given to students within the Institute of Applied Agriculture. Course cannot be used to fulfill a requirement for a Robert H. Smith School of Business major or minor.

Principles of market demand are used to develop a consumer oriented market strategy for agricultural businesses. Topics include market structures, target marketing, market segmentation, niche marketing and direct marketing. Market concepts unique to agriculture products are also covered.

Class will meet in person: Wednesday, January 30, 2019 from 6-8pm - SMADC Office at 15045 Burnt Store Road, Hughesville, MD 20637 Wednesday, March 13, 2019 from 6-8pm - SMADC Office at 15045 Burnt Store Road, Hughesville, MD 20637 Sunday, April 14, 2019 from 10am-12pm - Dupont Circle Farmers Market, 1500 20th Street NW, Washington, DC 20036 Wednesday, May 15, 2019 from 6-8pm - SMADC Office at 15045 Burnt Store Road, Hughesville, MD 20637

0201	Meredith Epstein Contact instructor or department for details. Class time/details on ELMs	Seats (Total: 25) ONLINE	

INAG104 **Agricultural Mathematics**

Credits: 3 Grading Method: Regular, Audit

Restricted to students in the AGNR-Institute of Applied Agriculture department. Others by permission of the AGNR-Institute of Applied Agriculture department. The development of problem-solving skills often used in the everyday world of work. Problems involving soils, fertilizers, seeding rates, feed mixtures, and business finance. Development of mathematical skills in solving basic equations, the use of percent and ratios, and calculating various linear and cubic measurements.

0101	Larisa Cioaca MWF 9:00am - 9:50am	Seats (Total: 20) JUL 1123	

INAG105 **Soils and Fertilizers**

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-Institute of Applied Agriculture department.

Soils and Fertilizers is an introductory course for students entering careers related to applied agricultural production. The course is divided into three subject areas: soil properties, soil fertility, and environmental concerns of using soils for agricultural production. Emphasis is placed upon the characteristics of Maryland soils which are similar to the soils in the mid-Atlantic region. The importance of nutrient management and non-point source pollution of the Chesapeake Bay are covered in the course.

Must be a major in AGNR-College of Agriculture & Natural Resources OR permission of AGNR-institute of Applied Agriculture department.

0101	Kenneth Ingram MW 1:00pm - 1:50pm F 1:00pm - 2:50pm	Seats (Total: 15) JUL 1123 JUL 1111	 Lab
0102	Kenneth Ingram MW 1:00pm - 1:50pm F 10:00am - 11:50am	Seats (Total: 15) JUL 1123 JUL 1111	 Lab

INAG106 **Pesticide Use and Safety**

Credits: 2 Grading Method: Regular

Additional information: Priority enrollment will be given to students in the IAA program or to students in the College of Agriculture and Natural Resources (AGNR).

An overview of pesticide use and safety. Topics include environmental protection, labeling, personal safety, first aid, formulation and chemistry, equipment, disposal, storage, record-keeping and liability. The course prepares students to take the Maryland State test for a private applicator's license.

Restricted to students in the AGNR-Institute of Applied Agriculture department. Others by permission of the AGNR-Institute of Applied Agriculture department.

0101	Ronald Myers W 3:00pm - 4:50pm	Seats (Total: 25) JUL 1123

INAG110 Oral Communication

Credits: 3 Grading Method: Regular, Audit General Education: FSOC

Credit only granted for: COMM107, COMM200, INAG110, JOUR130, THET285.

A study of how perception, self-concept, and verbal and nonverbal communications affect the communication process as it emerges in the workplace. The course provides skill training in speech writing, public speaking, group communication, interpersonal communication, listening, and responding.

0101	Eric Dunning MWF 8:00am - 8:50am	Seats (Total: 19) JUL 1105
0201	Amy Fisher MWF 8:00am - 8:50am	Seats (Total: 19) PLS 1162
0301	Robert Ballenger MWF 9:00am - 9:50am	Seats (Total: 19) CCC 1111
0401	Eric Dunning MWF 9:00am - 9:50am	Seats (Total: 19) JUL 1105
0501	Amy Fisher MWF 9:00am - 9:50am	Seats (Total: 19) PLS 1162
0701	Amy Fisher MWF 10:00am - 10:50am	Seats (Total: 19) PLS 1158

0801	Robert Ballenger MWF 10:00am - 10:50am	Seats (Total: 19) CCC 1111
0901	Chelsea Mays-Williams MWF 11:00am - 11:50am	Seats (Total: 19) JUL 1105
1001	Edward Priola MWF 11:00am - 11:50am	Seats (Total: 19) CCC 1115
1101	Robert Ballenger MWF 11:00am - 11:50am	Seats (Total: 19) CCC 1111
1201	Michelle Molinaro MWF 12:00pm - 12:50pm	Seats (Total: 19) JMP 2202
1301	Chelsea Mays-Williams MWF 12:00pm - 12:50pm	Seats (Total: 19) ATL 0201
1401	Samuel Rubin MWF 12:00pm - 12:50pm	Seats (Total: 19) CCC 1111
1501	Michelle Molinaro MWF 1:00pm - 1:50pm	Seats (Total: 19) JMP 2202
1601	Chelsea Mays-Williams MWF 1:00pm - 1:50pm	Seats (Total: 19) ATL 0201
1701	Samuel Rubin MWF 1:00pm - 1:50pm	Seats (Total: 19) CCC 1111
1801	Michelle Molinaro MWF 2:00pm - 2:50pm	Seats (Total: 19) JMP 2202
1901	Edward Priola MWF 2:00pm - 2:50pm	Seats (Total: 19) PLS 1115
2001	Samuel Rubin MWF 2:00pm - 2:50pm	Seats (Total: 19) CCC 1111
2101	Heather McHale MW 3:00pm - 4:15pm	Seats (Total: 19) PLS 1162

2201	Heather McHale M 6:00pm - 8:50pm	Seats (Total: 19) HBK 0108
2301	Chelsea Mays-Williams W 6:00pm - 8:50pm	Seats (Total: 19) HBK 0108
2401	Amy Fisher TuTh 8:00am - 9:15am	Seats (Total: 19) JMP 2202
2501	Eric Dunning TuTh 8:00am - 9:15am	Seats (Total: 19) JUL 1105
2601	Amy Fisher TuTh 9:30am - 10:45am	Seats (Total: 19) JMP 2202
2701	Eric Dunning TuTh 9:30am - 10:45am	Seats (Total: 19) JUL 1105
2801	Edward Priola TuTh 9:30am - 10:45am	Seats (Total: 19) JUL 1123
2901	Edward Priola TuTh 11:00am - 12:15pm	Seats (Total: 19) JUL 1105
3001	Chelsea Mays-Williams TuTh 11:00am - 12:15pm	Seats (Total: 19) CCC 1115
3101	Eric Dunning TuTh 11:00am - 12:15pm	Seats (Total: 19) PLS 1158
3201	Michelle Molinaro TuTh 12:30pm - 1:45pm	Seats (Total: 19) PLS 1168
3301	JoEllen Barnhart TuTh 12:30pm - 1:45pm	Seats (Total: 19) JUL 1105
3401	Robert Ballenger TuTh 12:30pm - 1:45pm	Seats (Total: 19) PLS 1158
3501	Michelle Molinaro TuTh 2:00pm - 3:15pm	Seats (Total: 19) PLS 1162

3601	Robert Ballenger TuTh 2:00pm - 3:15pm	Seats (Total: 19) PLS 1164
3701	Samuel Rubin TuTh 2:00pm - 3:15pm	Seats (Total: 19) PLS 1172
3801	Samuel Rubin TuTh 3:30pm - 4:45pm	Seats (Total: 19) PLS 1172
3901	JoEllen Barnhart TuTh 3:30pm - 4:45pm	Seats (Total: 19) JUL 1105
4001	JoEllen Barnhart TuTh 5:00pm - 6:15pm	Seats (Total: 19) JUL 1105
4101	JoEllen Barnhart TuTh 11:00am - 12:15pm	Seats (Total: 19) CHE 2145

INAG110S **Oral Communication**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSOC

Credit only granted for: COMM107, COMM200, INAG110, JOUR130, THET285.

A study of how perception, self-concept, and verbal and nonverbal communications affect the communication process as it emerges in the workplace. The course provides skill training in speech writing, public speaking, group communication, interpersonal communication, listening, and responding.

0601	Edward Priola MWF 10:00am - 10:50am	Seats (Total: 19) CCC 1115

INAG132 **Agricultural Leadership and Teamwork**

Credits: 3 | Grading Method: Regular

Restriction: Students at the Institute of Applied Agriculture (IAA); or students at the College of Agriculture and Natural Resources (AGNR); or permission may be granted to other students based on available space.

Introduces fundamental concepts related to leadership and teamwork in agricultural organizations. Topics include leadership practices and skills; relationships between leadership, authority, power, and ethics; team decision-making and management; and organizational culture and change. Students will develop effective leadership skills necessary for leading agricultural organizations.

Meets in a blended format. Approximately half of the scheduled face-to-face course meetings will be replaced by asynchronous online activities, including video lectures, discussions, and graded assignments.

0101	Larisa Cioaca M 3:00pm - 4:15pm Class time/details on ELMs	Seats (Total: 25) JUL 1123 ONLINE

INAG199 **Special Problems**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Restricted to students in the AGNR-Institute of Applied Agriculture department. Others by permission of the AGNR-Institute of Applied Agriculture department.

0101	Geoffrey Rinehart Contact instructor or department for details.	Seats (Total: 5)
0201	Larisa Cioaca Contact instructor or department for details.	Seats (Total: 5)
0301	Kenneth Ingram Contact instructor or department for details.	Seats (Total: 5)
0401	Roy Walls Contact instructor or department for details.	Seats (Total: 5)
0501	Meredith Epstein Contact instructor or department for details.	Seats (Total: 5)
0601	Glori Hyman Contact instructor or department for details.	Seats (Total: 5)

INAG199C **Special Problems; in AgriScience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restricted to students in the AGNR-Institute of Applied Agriculture department. Others by permission of the AGNR-Institute of Applied Agriculture department.

0101	Glori Hyman Contact instructor or department for details.	Seats (Total: 5)

INAG204 **Agricultural Business Management**

Credits: 3 Grading Method: Regular

Recommended: INAG102. Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-Institute of Applied Agriculture department. Additional information: Priority in enrollment will be given to students within the Institute of Applied Agriculture. May not count toward any BMGT major or minor requirement.

This course integrates various concepts related to managing a profitable agricultural business. Topics include business management and decision making, preparing a business plan, financial analysis and budgeting, risk and investment management, and small business taxes, among others. Students will gain relevant knowledge and skills as they complete the comprehensive business plan for successfully managing an agricultural business.

0101	Larisa Cioaca	Seats (Total: 27)
	MWF 12:00pm - 12:50pm	JUL 1123

INAG206 **Agricultural Business Law**

Credits: 3 Grading Method: Regular, Audit

Restriction: Students at the Institute of Applied Agriculture (IAA); or students at the College of Agriculture and Natural Resources (AGNR); or permission may be granted to other students based on available space. Additional information: Course cannot be used to fulfill a requirement for a Robert H. Smith School of Business major or minor.

This course introduces various legal concepts and their relationships to agricultural business and transactions. Topics include torts, criminal law, contracts, promissory notes, property, partnerships, business entities, employment, and bankruptcy, among others. Students will gain a general understanding of the legal system that will help them manage and/or operate profitable agricultural businesses.

0101	Michael Grady, Glori Hyman	Seats (Total: 30)
	W 5:30pm - 8:30pm	JUL 1123

INAG207 **Power and Machinery**

Credits: 3 Grading Method: Regular

Prerequisite: INAG250 or PLSC204. Restriction: Must be in a major within the AGNR-Institute of Applied Agriculture department; or permission of AGNR-Institute of Applied Agriculture department. Additional information: Priority will be given to IAA students and permission will be granted to AGNR students and others on a space available basis.

The basic principles of compact equipment management, including selection, maintenance, operation, adjustment and troubleshooting of agricultural machinery and power units, will be studied. The methods of power development, measurement, and transmission, through power trains both mechanical and hydraulic, will be studied. A systematic disassembly, analysis, diagnosis and reassembly of a small engine will be completed by each student.

0101	Roy Walls	Seats (Total: 12)	
	Tu 9:00am - 10:50am	ANS 0504	
	Th 8:00am - 10:50am	ANS 0504	Lab

INAG213 **Crop Production Practices**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-Institute of Applied Agriculture department. Additional information: Priority in enrollment will be given to students within the Institute of Applied Agriculture.

Crop Production Practices covers the applied methods of producing various vegetable and agronomic crops in Maryland. This course focuses on commercial scale production where economics impact production decisions. Topics include crop rotation, cropping systems, nutrient management, and integrated pest control strategies. Throughout the course, economically, socially and ecologically sustainable production practices will be addressed.

0101	Meredith Epstein	Seats (Total: 12)	
	Th 2:00pm - 5:00pm	JUL 1111	

INAG214 **Agronomic Principles of Golf Turf Management**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Recommended: INAG107; or PLSC305. Restriction: Must be in a major within the AGNR-Institute of Applied Agriculture department; or must be in one of the following programs (Plant Sciences; Plant Sciences: Horticulture & Crop Production; Plant Sciences: Landscape Management; Plant Sciences: Plant Science; Plant Sciences: Turf & Golf Course Mgmt; Plant Sciences: Urban Forestry) ; or permission of instructor. Additional information: Enrollment priority is given to students within the Institute of Applied Agriculture (IAA) and the Plant Science and Landscape Architecture Department.

An in-depth study of golf course management practices such as turfgrass selection, fertilization, mowing, irrigation, and cultivation practices. Weed control programs will be discussed in detail for the different playing surfaces on the golf course. Field plot work, laboratory work, and field trips will reinforce lecture material.

0101	Geoffrey Rinehart Tu 2:00pm - 4:00pm Th 2:00pm - 4:00pm	Seats (Total: 20) JUL 1111 JUL 2120

INAG224 **Greenhouse and Plant Production Management**

Credits: 3 Grading Method: Regular

Restriction: This course is open to students in AGNR. Priority enrollment will be given to students in the Institute of Applied Agriculture. All other majors will be granted permission based on available space. Credit only granted for: INAG 114 or INAG 224.

Principles of managing greenhouses--structures, coverings, lighting, irrigation, heating and cooling systems--and their effects on plant production. Plant propagation methods and environments will be analyzed and practiced.

0101	Kenneth Ingram TuTh 11:00am - 1:00pm	Seats (Total: 15) JUL 1123

INAG235 **Irrigation and Drainage**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of instructor. Also offered as: PLSC235. Credit only granted for: INAG235, PLSC235 or PLSC489I. Formerly: PLSC489I. Additional information: Priority enrollment will be given to IAA and PLSC majors. By permission for available seats.

An overview of U.S. and state water doctrines and plant water use rates. Irrigation systems for residential and athletic field use will be discussed covering such topics as hydraulics, sprinkler spacing, pipe selection and sizing, pumps, controllers, valves, and irrigation trouble shooting. Surface and subsurface drainage for turfgrass sites will also be covered.

0101	Geoffrey Rinehart TuTh 11:00am - 1:00pm *Open to AGNR and IAA students only.*	Seats (Total: 22) JUL 1111

INAG248 **Topics in Sustainable Agriculture**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Through readings, class discussions, and guest speakers, this one-credit seminar course exposes students to current trends, concerns and research in sustainable agriculture. It allows students to explore various interest areas and discuss a variety of topics as they relate to sustainable practices.

0101	Meredith Epstein	Seats (Total: 25)
	Tu 6:00pm - 7:50pm	JUL 1123

INAG250 **Fundamentals of Agricultural Mechanics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of AGNR-Institute of Applied Agriculture department. Also offered as: PLSC204, PLSC204. Credit only granted for: ENBE200 or PLSC204 or INAG250. Formerly: ENBE200. Additional information: Priority given to IAA majors and AGNR students whose major requires this course. Permission will be granted to other students on seats available basis.

A comprehensive course that teaches the fundamentals of agricultural related mechanics. Lecture and lab exercises will cover the broad range of topics associated with agricultural mechanics including electricity, plumbing, welding processes, and wood and metal working applications. Emphasis will be given to the design and installation of electrical circuits. It will also include project planning and implementation including development of safety protocols for each area of study and introduction of GPS equipment and software for survey data collection.

0101	Roy Walls	Seats (Total: 8)
	MW 2:00pm - 5:00pm	ANS 0504

INAG299A **Supervised Work Experience; Internship I**

Credits: 1 Grading Method: Sat-Fail

Restricted to students in the AGNR-Institute of Applied Agriculture department. Others by permission of the AGNR-Institute of Applied Agriculture department.

Contact department for information to register for this course.

INAG299B **Supervised Work Experience; Internship II**

Credits: 1 Grading Method: Regular

Restricted to students in the AGNR-Institute of Applied Agriculture department. Others by permission of the AGNR-Institute of Applied Agriculture department.

Contact department for information to register for this course.

INFM Information Management Spring 2019

INFM289I **Social Networking: Technology and Society**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS, SCIS

0101	Jennifer Golbeck	Seats (Total: 130)
	Class time/details on ELMs	ONLINE

INFM603 **Information Technology and Organizational Context**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must not have completed LBSC671 or LBSC690; and permission of INFO-College of Information Studies.

Application of communication and information technologies to support work processes, including technology-enhanced communication networks, computer-supported collaborative work, decision-support systems, interactive systems, and systems analysis. Acquisition of information systems and their integration into the organization.

0101	Paul Jacobs	Seats (Total: 35)
	W 6:00pm - 8:45pm	HBK 0109

INFM612 **Management Concepts and Principles for Information Professionals**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies.

Key aspects of management - focusing on planning, organizing, leading and controlling. The evolution of management, innovative management for the changing world, management styles and leadership, managerial planning, goal setting and decision making. Ethical issues, designing adaptive organizations responding to change, global environment, diversity, and utilizing the appropriate technology to provide effective management of information programs and services.

ML01	Vikas Sahasrabudhe, Taverekere Srikantaiah	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

INFM620 **Introduction to Strategic Information Management**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INFM612; or LBSC631; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Strategic management is the comprehensive collection of tasks, activities, and processes organizations use to coordinate and align resources and actions with its mission, vision, and strategy. Due to changes occurring in our global landscape, the integration of business and technology is compelling organizations to move beyond traditional, reactive, and silo-based data management approaches to a managed, predictive approach that treats information as a strategic asset and uses it to create business value. To meet challenges of this hyper-competitive environment, this course will provide you with an introduction to the strategic management of information assets for competitive differentiation and sustained business success.

ML01	Vikas Sahasrabudhe	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INFM719 **Independent Study**

Credits: 1-3 Grading Method: Regular

Intensive individual study under faculty supervision.

Contact department for information to register for this course.

INFM737 **Information Management Capstone Experience**

Credits: 3 Grading Method: Sat-Fail

Prerequisite: INFM736; and must have earned a minimum of 27 credits in the MIM Program. Or permission of instructor. Restriction: Must be in Information Management (Master's) program; and permission of INFO-College of Information Studies.

The Information Management Capstone Experience I and II are the culminating experience of the Master of Information Management program, taken in the students final two semesters. The capstone experience provide students with the opportunity to integrate and synthesize the knowledge and skills acquired throughout their MIM course work while working in a real world Information Management project. These courses must be taken in succession.

0101	Kathy Weaver	Seats (Total: 40)
	M 2:00pm - 4:45pm	HBK 0115

INFM799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Intensive individual research course under the supervision of a faculty member.

Contact department for information to register for this course.

INST Information Studies Spring 2019

INST126 **Introduction to Programming for Information Science**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in MATH115; or must have math eligibility of MATH140 or higher; or permission of instructor. Restriction: Must not have completed INST326; and must be in Information Science program.

An introduction to computer programming for students with very limited or no previous programming experience. Topics include fundamental programming concepts such as variables, data types, assignments, arrays, conditionals, loops, functions, and I/O operations.

0101	C Rytting TuTh 9:30am - 10:45am	Seats (Total: 50) CSI 1121
0103	Pamela Duffy TuTh 2:00pm - 3:15pm	Seats (Total: 50) ARC 1101
0104	Jeannette Kartchner MWF 1:00pm - 1:50pm	Seats (Total: 50) KEY 0103
0105	Jeannette Kartchner MWF 11:00am - 11:50am	Seats (Total: 50) PHY 4221

INST152 **Foundational Scholarship and Critical Inquiry in the Information Age**

Credits: 3 Grading Method: Regular, Pass-Fail General Education: DSSP

Examining the phenomenon of "fake news" using the principles of information literacy, students will develop their skills in locating, analyzing, and evaluating different information sources -- in the classroom, in their personal lives, and in the workplace.

0101	Courtney Douglass TuTh 11:00am - 12:15pm	Seats (Total: 35) CSI 3120
0102	David Durden TuTh 5:00pm - 6:15pm	Seats (Total: 35) JMZ 2206
0104	Jordan Sly M 2:00pm - 4:45pm	Seats (Total: 35) CHM 1224

INST201 **Introduction to Information Science**

Credits: 3 Grading Method: Regular, Audit General Education: DSHS

Credit only granted for: INST201 or INST301. Formerly: INST301.

Examining the effects of new information technologies on how we conduct business, interact with friends, and go through our daily lives. Understanding how technical and social factors have influenced the evolution of information society. Evaluating the transformative power of information in education, policy, and entertainment, and the dark side of these changes.

0101	Ryan O'Grady Class time/details on ELMs	Seats (Total: 100) ONLINE
0102	Kelly Hoffman MWF 11:00am - 11:50am	Seats (Total: 50) HBK 0115
0103	Sarah Gilbert TuTh 3:30pm - 4:45pm	Seats (Total: 100) TYD 0117
0105	Joyce Garczynski Class time/details on ELMs	Seats (Total: 100) ONLINE
0106	Eric Hung Class time/details on ELMs	Seats (Total: 50) ONLINE
0107	Abbie Basile Class time/details on ELMs	Seats (Total: 50) ONLINE

INST309 **Independent Study in Information Science**

Credits: 1-3 Grading Method: Regular

Individual independent study of an aspect of information science, selected according to student interest and need in consultation with a member of the iSchool faculty. Repeatable to 6 credits if content differs.

Contact department for information to register for this course.

INST311 **Information Organization**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); or must be concurrently enrolled in INST201 or INST301. Restriction: Must be in Information Science program.

Examines the theories, concepts, and principles of information, information representation and organization, record structures, description, and classification. Topics to be covered in this course include the methods and strategies to develop systems for storage, organization, and retrieval of information in a variety of organizational and institutional settings, as well as policy, ethical, and social implications of these systems.

0101	Ryan O'Grady Class time/details on ELMs	Seats (Total: 50) ONLINE
0102	Katy Lawley TuTh 11:00am - 12:15pm	Seats (Total: 96) IRB 1116
0104	Katrina Fenlon TuTh 9:30am - 10:45am	Seats (Total: 50) CSI 1122

INST314 **Statistics for Information Science**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed or be concurrently enrolled in INST201; or must have completed or be concurrently enrolled in INST301. And minimum grade of C- in INST201 and INST301; and MATH115; and STAT100; and minimum grade of C- in MATH115 and STAT100. Restriction: Must be in Information Science program; or permission of INFO-College of Information Studies. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Basic concepts in statistics including measure construction, data exploration, hypothesis development, hypothesis testing, pattern identification, and statistical analysis. The course also provides an overview of commonly used data manipulation and analytic tools. Through homework assignments, projects, and in-class activities, you will practice working with these techniques and tools to create information resources that can be used in individual and organizational decision-making and problem-solving.

0104	Hernisa Kacorri TuTh 2:00pm - 3:15pm	Seats (Total: 60) JMZ 0220
0105	Shawn Janzen TuTh 3:30pm - 4:45pm	Seats (Total: 130) ESJ 1202

INST326 **Object-Oriented Programming for Information Science**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in INST126. And 1 course with a minimum grade of C- from (INST201, INST301); or must be concurrently enrolled in INST201 or INST301. Restriction: Must be in Information Science program.

An introduction to programming, emphasizing understanding and implementation of applications using object-oriented techniques. Topics to be covered include program design and testing as well as implementation of programs.

0101	Joshua Westgard MWF 1:00pm - 1:50pm	Seats (Total: 50) SQH 1117
0102	Aric Bills TuTh 12:30pm - 1:45pm	Seats (Total: 50) TWS 1310
0103	Jennifer Golbeck Class time/details on ELMs	Seats (Total: 75) ONLINE
0104	Aric Bills TuTh 3:30pm - 4:45pm	Seats (Total: 50) SQH 1117
0105	Edward Summers MWF 10:00am - 10:50am	Seats (Total: 50) EDU 2119

INST327 **Database Design and Modeling**

Credits: 3 | Grading Method: Regular, Audit | General Education: DSSP

Prerequisite: Minimum grade of C- in INST126. And 1 course with a minimum grade of C- from (INST201, INST301); or must be concurrently enrolled in INST201 or INST301. Restriction: Must be in Information Science program. Credit only granted for: INST327 or BMGT402.

Introduction to databases, the relational model, entity-relationship diagrams, user-oriented database design and normalization, and Structured Query Language (SQL). Through labs, tests, and a project, students develop both theoretical and practical knowledge of relational database systems.

0101	Tammie Nelson TuTh 3:30pm - 4:45pm	Seats (Total: 50) BPS 1236
0102	Timothy Richards MWF 10:00am - 10:50am	Seats (Total: 50) HBK 0115
0103	Vedat Diker TuTh 5:00pm - 6:15pm	Seats (Total: 50) ATL 2428

0106	Pamela Duffy MWF 2:00pm - 2:50pm	Seats (Total: 50) EDU 3315
ESG1	Pamela Duffy TuTh 9:45am - 11:00am *Restricted to students in the BSIS @ USG Program.*	Seats (Total: 40) BLD3 2211

INST335 **Teams and Organizations**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in PSYC100. Restriction: Must be in Information Science program.

Examines principles, methods and types of leadership with an emphasis on goal setting, motivation, problem solving, and conflict resolution. Examines principles of developing teams and managing team projects through planning and execution, including estimating costs, managing risks, scheduling, staff and resource allocation, communication, tracking, and control. Trains students to recognize and capitalize on opportunities to use information to increase efficiency, improve performance, and support innovation within teams and organizations. Focuses on strategic use of emerging technologies and new information resources to execute information-enabled change.

0101	Philip Piety TuTh 2:00pm - 3:15pm	Seats (Total: 50) ARC 1103
0102	Susan Winter, Taverekere Srikantaiah TuTh 12:30pm - 1:45pm	Seats (Total: 50) HBK 0115
0103	Susannah Paletz MW 3:00pm - 4:15pm	Seats (Total: 50) CSI 2117
0104	Susannah Paletz MW 1:00pm - 2:15pm	Seats (Total: 50) CSI 2117
0105	Philip Piety TuTh 9:30am - 10:45am	Seats (Total: 50) EDU 3315

INST346 **Technologies Infrastructure and Architecture**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and 1 course with a minimum grade of C- from (INST326, CMSC131); and minimum grade of C- in INST327. Restriction: Must be in Information Science program. Credit only granted for: INST346 or BMGT405.

Examines the basic concepts of computer hardware, systems software, networking, client/server architectures, cloud computing, distributed systems, and high performance computing as applied to information rich domains. Technology and architectures will be discussed within the contexts of solving social issues, supportingscience, and conducting business operations. Current computing topics such as web environments, IoT, security, management, and policy will also be reviewed.

0102	Dennis Frezzo Class time/details on ELMs	Seats (Total: 50) ONLINE
0104	Donal Heidenblad, Timothy Richards MWF 1:00pm - 1:50pm	Seats (Total: 50) SQH 1119
0105	Timothy Richards, Donal Heidenblad MWF 8:00am - 8:50am	Seats (Total: 50) ATL 2428

INST352 **Information User Needs and Assessment**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST311. Restriction: Must be in Information Science program; and permission of INFO-College of Information Studies.

Focuses on use of information by individuals, including the theories, concepts, and principles of information, information behavior and mental models. Methods for determining information behavior and user needs, including accessibility issues will be examined and strategies for using information technology to support individual users and their specific needs will be explored.

0101	Morgan Adle TuTh 11:00am - 12:15pm	Seats (Total: 50) ARC 1103
0104	Wayne Lutters TuTh 3:30pm - 4:45pm	Seats (Total: 50) EDU 2119
0105	Gagan Jindal Class time/details on ELMs	Seats (Total: 30) ONLINE
0108	Chad Doran Class time/details on ELMs	Seats (Total: 40) ONLINE

ESG1	Chad Doran MW 8:00am - 9:15am *Restricted to students in the BSIS @ USG Program.*	Seats (Total: 40) BLD3 2225

INST354 **Decision-Making for Information Science**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST314, MATH115, STAT100, and PSYC100. Restriction: Must be in Information Science program.

Examines the use of information in organizational and individual decision-making, including the roles of information professionals and information systems in informed decision-making through techniques such as data analysis and regression, optimization, sensitivity analysis, decision trees, risk analysis and business simulation models.

0101	Christopher Antoun Class time/details on ELMs	Seats (Total: 50) ONLINE
0102	Brian Kim TuTh 2:00pm - 3:15pm	Seats (Total: 50) TYD 2109
0103	Abdirisak Mohamed Class time/details on ELMs	Seats (Total: 40) ONLINE
ESG1	Lori Perine TuTh 8:00am - 9:15am *Restricted to students in the BSIS @ USG Program.*	Seats (Total: 40) BLD3 2225

INST362 **User-Centered Design**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST326; and minimum grade of C- in PSYC100. Restriction: Must be in Information Science program; and permission of INFO-College of Information Studies.

Introduction to human-computer interaction (HCI), with a focus on how HCI connects psychology, information systems, computer science, and human factors. User-centered design and user interface implementation methods discussed include identifying user needs, understanding user behaviors, envisioning interfaces, and utilizing prototyping tools, with an emphasis on incorporating people in the design process from initial field observations to summative usability testing.

0102	Tamara Clegg MWF 3:00pm - 3:50pm	Seats (Total: 50) PHY 1201
0103	Ge Gao MWF 11:00am - 11:50am	Seats (Total: 45) ITV 1111
0104	Jonathan Lazar TuTh 3:30pm - 4:45pm	Seats (Total: 50) EGR 1108
ESG1	Stacy Surla MW 9:45am - 11:00am *Restricted to students in the BSIS @ USG Program.*	Seats (Total: 40) BLD3 2225

INST377 **Dynamic Web Applications**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST327, STAT100, MATH115, and PSYC100. Restriction: Must be in Information Science program. Credit only granted for: INST377 or BMGT406.

An exploration of the basic methods and tools for developing dynamic, database-driven websites, including acquiring, installing, and running web servers, database servers, and connectability applications.

0101	Donal Heidenblad TuTh 3:30pm - 4:45pm	Seats (Total: 50) TYD 1118
0102	Donal Heidenblad TuTh 9:30am - 10:45am	Seats (Total: 50) HJP 2242

INST408E **Special Topics in Information Science; Digital Educational Infrastructures: Practice, Theories, and Evidence of Sociotechnical Systems**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Selected topics in information science.

0101	Philip Piety	Seats (Total: 10)
	Tu 6:00pm - 8:45pm	HBK 4113

INST408J **Special Topics in Information Science; Disaster Recovery in Japan**

Credits: 3 Grading Method: Regular, Audit

Selected topics in information science.

Contact department for information to register for this course.

INST408V **Special Topics in Information Science; Cybersecurity Policy: Practical Hacking for Policy Makers**

Credits: 3 Grading Method: Regular, Audit

Selected topics in information science.

Also offered as PLCY388C. Credit only granted for PLCY388C or INST408V. Students will explore the key issues facing policy makers attempting to manage the problem of cybersecurity from its technical foundations to domestic and international policy considerations surrounding governance, privacy, risk management, and operational orchestration. It is designed for students with no background in information technology, and will provide the principles to understand the current debates shaping a rapidly evolving security landscape.

0101	Charles Harry	Seats (Total: 50)
	TuTh 3:30pm - 4:45pm	PHY 4221

INST408W **Special Topics in Information Science; Decision Making for Cybersecurity**

Credits: 3 Grading Method: Regular, Audit

Selected topics in information science.

Prerequisite: INST314 and INST364. Organizations and individuals make decisions about cybersecurity technology and policy based on limited information. This course explores both how those decisions should be made and how those decisions are made in practice. Topics will cover a range of perspectives from human decision-making heuristics to quantitative risk management approaches.

0101	Susan Campbell	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	HBK 0103

INST408Y **Special Topics in Information Science; Privacy and Cybersecurity**

Credits: 3

Grading Method: Regular, Audit

Selected topics in information science.

Prerequisite: INST201 and InfoSci major, or permission of instructor. Examining ethical, privacy, and security challenges of big data and the digital age. Exploring challenges throughout data collection, analysis, and dissemination processes. Evaluating and critiquing real-world cases of ethical gray areas in modern society. Identifying future challenges in IoT, AI, and data aggregation techniques. Applying new privacy and security skills to personal data practices.

0101	Jessica Vitak TuTh 9:30am - 10:45am	Seats (Total: 50) BPS 1236

INST414 **Data Science Techniques**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST314, STAT100, MATH115, and PSYC100. Restriction: Must be in Information Science program.

An exploration of how to extract insights from large-scale datasets. The course will cover the complete analytical funnel from data extraction and cleaning to data analysis and insights interpretation and visualization. The data analysis component will focus on techniques in both supervised and unsupervised learning to extract information from datasets. Topics will include clustering, classification, and regression techniques. Through homework assignments, a project, exams and in-class activities, students will practice working with these techniques and tools to extract relevant information from structured and unstructured data.

0101	William Bowser TuTh 5:30pm - 6:45pm	Seats (Total: 75) LEF 2166
0102	Jennifer Proctor MWF 10:00am - 10:50am	Seats (Total: 45) MCB 1207

INST447 **Data Sources and Manipulation**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST327, STAT100, MATH115, and PSYC100; and 1 course with a minimum grade of C- from (INST326, CMSC131). Restriction: Must be in Information Science program.

Examines approaches to locating, acquiring, manipulating, and disseminating data. Imperfection, biases, and other problems in data are examined, and methods for identifying and correcting such problems are introduced. The course covers other topics such as automated collection of large data sets, and extracting, transforming, and reformatting a variety of data and file types.

0101	Donal Heidenblad	Seats (Total: 115)
	Class time/details on ELMs	ONLINE

INST462 **Introduction to Data Visualization**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST314, MATH115, PSYC100, and STAT100. Restriction: Must be in Information Science program.

Exploration of the theories, methods, and techniques of visualization of information, including the effects of human perception, the aesthetics of information design, the mechanics of visual display, and the semiotics of iconography.

0102	Eric Newburger	Seats (Total: 50)
	TuTh 9:30am - 10:45am	HBK 0115
0103	Sriram Badam	Seats (Total: 76)
	Class time/details on ELMs	ONLINE
ESG1	Jennifer Golbeck	Seats (Total: 70)
	Class time/details on ELMs	ONLINE
	Restricted to students in the BSIS @ USG Program.	

INST466 **Technology, Culture, and Society**

(Perm req)

Credits: 3 Grading Method: Regular, Audit General Education: DVCC

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301). Restriction: Permission of INFO-College of Information Studies.

Individual, cultural, and societal outcomes associated with development of information & communication technologies (ICTs), including pro- and anti-social factors. Unpacking how gender, race, ethnicity, sexual orientation, disabilities, and political affiliations affect consumption and production of online experiences. Unpacking how structures of dominance, power and privilege manifest at individual, institutional and cultural levels.

0101	Jessica Vitak TuTh 2:00pm - 3:15pm	Seats (Total: 45) ARC 1105

INST490 **Integrated Capstone for Information Science**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST311, INST314, INST326, INST327, INST335, INST346, INST352, INST362, PSYC100, STAT100, and MATH115. Restriction: Must be in Information Science program; and permission of INFO-College of Information Studies.

The capstone provides a platform for Information Science students where they can apply a subset of the concepts, methods, and tools they learn as part of the Information Science program to addressing an information problem or fulfilling an information need.

0101	Elizabeth Bonsignore Th 6:00pm - 8:45pm	Seats (Total: 40) ESJ 0215
0103	C Rytting TuTh 3:30pm - 4:45pm	Seats (Total: 50) PLS 1130
0104	Mary Kendig MW 4:00pm - 5:15pm	Seats (Total: 40) CHE 2118
0105	Andrew Fellows W 6:00pm - 8:45pm	Seats (Total: 40) KEY 0103

INST604 **Introduction to Archives and Digital Curation**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC604 or LBSC605.

Overview of the principles, practices, and applications in the archival and digital curation fields.

ML01	Adam Kriesberg Class time/details on ELMs	Seats (Total: 40) ONLINE

INST612 **Information Policy**

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST612 or LBSC625. Formerly: LBSC625.

Nature, structure, development and application of information policy. Interactions of social objectives, stakeholders, technology and other forces that shape policy decisions.

ML01	Pratima Kshetry, Taverekere Srikantaiah	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

INST614 **Literacy and Inclusion**

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies.

The educational and psychological dimensions of helping and supporting new users to become information literate and experienced users to remain engaged.

ML01	Ursula Gorham-Oscilowski	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INST616 **Open Source Intelligence**

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies.

An introduction to Open Source Intelligence (OSINT) for Information Professionals. For the purposes of this course, OSINT will be defined as the use of free, publicly available online sources that can be used to gather information that may be later used to conduct analysis or reach conclusions. Students will learn basic and advanced techniques for using search engines, people directories, social media networks, location-based services, images and videos, public records, and other sources. The course will also offer students more technical aspects of open-source information, including domains, IP addresses, and the deep web. Throughout the modules, data quality and validation procedures will be key topics.

0101	Mary Francis	Seats (Total: 30)
	W 2:00pm - 4:45pm	HBK 4115

INST622 **Information and Universal Usability**

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC622 OR INST622. Formerly: LBSC622.

Information services and technologies to provide equal experiences and outcomes to all users. Laws, standards, approaches, component concepts, access needs, and technologies in relation to physical and online information environments.

ML01	Renee Hill	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INST627 **Data Analytics for Information Professionals**

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies.

Skills and knowledge needed to craft datasets, perform quantitative and qualitative analyses, and develop information resources that bridge the gap between raw data and decision makers' needs.

0101	Shawn Janzen	Seats (Total: 30)
	Th 6:00pm - 8:45pm	HBK 0105

INST630 **Introduction to Programming for the Information Professional**

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies.

An introduction to computer programming intended for students with no previous programming experience. Topics include fundamentals of programming and current trends in user interface implementation that are relevant to information professionals.

0101	Vedat Diker	Seats (Total: 30)
	M 6:00pm - 8:45pm	ATL 2416

INST652 **Design Thinking and Youth**

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies.

Methods of design thinking specifically within and for youth contexts, including user-centered design, understanding user needs, ideation, contextual design, participatory design, iterative prototyping, and visual design. These topics will specifically be studied in the context of designing with and for youth.

ML01	Mega Subramaniam	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

INST702 **Advanced Usability Testing**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of instructor; or (INFM605 or INST631). Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INFM702 or INST702. Formerly: INFM702.

Usability testing methods -- how to design and implement them both for desktop and mobile sites. Students will learn the complex process of facilitating usability testing and how to synthesize test data into a report.

0101	Vera Rhoads	Seats (Total: 30)
	Tu 6:00pm - 8:45pm	CHM 1228

INST709 **Independent Study**

Credits: 1-3 Grading Method: Regular, Audit

Intensive individual study, reading, or research in an area of specialized interest under faculty supervision. Registration limited to the advanced student with the approval of the advisor and of the faculty member involved.

0101	Jennifer Preece	Seats (Total: 5)
	Contact instructor or department for details.	
0201	Keith Marzullo	Seats (Total: 5)
	Contact instructor or department for details.	
0301	Brian Butler	Seats (Total: 5)
	Contact instructor or department for details.	
0401	Michael Kurtz	Seats (Total: 5)
	Contact instructor or department for details.	
0501	Amanda Lazar	Seats (Total: 5)
	Contact instructor or department for details.	

0601	Vedat Diker Contact instructor or department for details.	Seats (Total: 5)
0701	Kenneth Heger Contact instructor or department for details.	Seats (Total: 5)
0801	Douglas Oard Contact instructor or department for details.	Seats (Total: 5)
0901	Ricardo Punzalan Contact instructor or department for details.	Seats (Total: 5)
1001	Ann Weeks Contact instructor or department for details.	Seats (Total: 5)
1101	Paul Jaeger Contact instructor or department for details.	Seats (Total: 5)
1201	Renee Hill Contact instructor or department for details.	Seats (Total: 5)
1301	Jennifer Golbeck Contact instructor or department for details.	Seats (Total: 5)
1401	Kari Kraus Contact instructor or department for details.	Seats (Total: 5)
1501	Beth St Jean Contact instructor or department for details.	Seats (Total: 5)
1601	Vanessa Frias-Martinez Contact instructor or department for details.	Seats (Total: 5)
1701	John Bertot Contact instructor or department for details.	Seats (Total: 5)
1801	Ping Wang Contact instructor or department for details.	Seats (Total: 5)
1901	Kathy Weaver Contact instructor or department for details.	Seats (Total: 5)
2001	Katy Lawley Contact instructor or department for details.	Seats (Total: 5)

2101	Katie Shilton Contact instructor or department for details.	Seats (Total: 5)
2201	Christopher Antoun Contact instructor or department for details.	Seats (Total: 5)
2301	Bill Kules Contact instructor or department for details.	Seats (Total: 5)
2401	Jessica Vitak Contact instructor or department for details.	Seats (Total: 5)
2501	Taverekere Srikantaiah Contact instructor or department for details.	Seats (Total: 5)
2601	Niklas Elmqvist Contact instructor or department for details.	Seats (Total: 5)
2701	Mega Subramaniam Contact instructor or department for details.	Seats (Total: 5)
2801	Eun Kyoung Choe Contact instructor or department for details.	Seats (Total: 5)
2901	Susan Winter Contact instructor or department for details.	Seats (Total: 5)
3001	Richard Marciano Contact instructor or department for details.	Seats (Total: 5)
3101	Yla Tausczik Contact instructor or department for details.	Seats (Total: 5)
3201	Philip Piety Contact instructor or department for details.	Seats (Total: 5)
3301	Hernisa Kacorri Contact instructor or department for details.	Seats (Total: 5)
3801	Elizabeth Bonsignore Contact instructor or department for details.	Seats (Total: 5)
4501	Tamara Clegg Contact instructor or department for details.	Seats (Total: 5)

4901	Gregg Vanderheiden Contact instructor or department for details.	Seats (Total: 5)
5501	David Loshin Contact instructor or department for details.	Seats (Total: 5)

INST711 **Interaction Design Studio**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed or be concurrently enrolled in INST631 and INST710.

Covers basic interaction design principles and design process from a studio-based design perspective. Focuses on how to design for interactions that will resonate with your audiences: how the features and functions of a project get translated into something people find usable, useful, and desirable. Explores the role of interaction designers. Students design and prototype interactive products, systems, and services.

0101	Eun Kyoung Choe Tu 2:00pm - 4:45pm	Seats (Total: 20) HBK 2119
0102	Patrick Thornton Th 6:00pm - 8:45pm	Seats (Total: 20) HBK 1108

INST728G **Special Topics in Information Studies; Smart Cities and Urban Data Science**

Credits: 3 Grading Method: Regular, Audit

Selected topics in information studies.

Also offered as URSP688Y. Credit granted for URSP688Y or INST728G. The proliferation of data, technology and new analytical methods are changing cities in rapid and dramatic fashion. These changes have implications for the look and feel of cities, the behavior patterns of the people who inhabit them, and the decisions made by people who govern them. As cities become smarter, our understanding of them must evolve in a similar fashion. This course will introduce students to the concept of Smart Cities and their implications for the current and future development of urban areas. Students will learn about the history of urban development and when cities gained their sentience, how cities learn and grow their intelligence, and how these trends shape the lives of urban and rural dwellers alike. The course begins by introducing the "components" of the smart city: new and novel data sources (embedded sensor networks, crowdsourcing), new methods of (connected devices, machine learning, data science), and new ways of modeling, simulating, and visualizing urban phenomena. The second half of the course discusses how these components are changing the performance and experience of different aspects of urban life inareas like transportation, public health, criminal justice, and social equity.

0101	Christopher Dempwolf	Seats (Total: 30)
	M 4:00pm - 6:40pm	Location: TBA

INST728J **Special Topics in Information Studies; Disaster Recovery in Japan**

Credits: 3 Grading Method: Regular, Audit

Selected topics in information studies.

Contact department for information to register for this course.

INST728T **Special Topics in Information Studies; Visual Design**

Credits: 3 Grading Method: Regular, Audit

Selected topics in information studies.

Restriction: Must be in the Master in Human-Computer Interation program.

0101	Justin Miller	Seats (Total: 30)
	W 6:00pm - 8:45pm	HBK 0115

INST728V **Special Topics in Information Studies; Digital Educational Infrastructures: Practice, Theories, and Evidence of Sociotechnical Systems**

Credits: 1-3 Grading Method: Regular, Audit

Selected topics in information studies.

0101	Philip Piety	Seats (Total: 10)
	Tu 6:00pm - 8:45pm	HBK 4113

INST733 **Database Design**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LBSC690, LBSC671, or INFM603; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST733 or LBSC793. Formerly: LBSC793.

Principles of user-oriented database design. Requirements analysis. Data modelling. Data integrity and security and multi-user databases. Implementing an information system using a database management system (DBMS).

ML01	Pratima Kshetry	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INST737 **Introduction to Data Science**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INST627; and (LBSC690, LBSC671, or INFM603). Or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

An exploration of some of the best and most general approaches to get the most information out of data through clustering, classification, and regression techniques.

This blended course will meet a total of four times during the semester on the following days: January 30, February 27, March 27, and April 24. All other coursework will be done online.

0101	Vanessa Frias-Martinez	Seats (Total: 30)
	W 2:00pm - 4:45pm	WDS 1114
	Class time/details on ELMs	ONLINE

INST741 **Social Computing Technologies and Applications**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INFM603 and INFM605; or (LBSC602 and LBSC671); or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INFM741 or INST741. Formerly: INFM741.

Tools and techniques for developing and configuring social computing applications. Theories and paradigms for social computing. Strengths and limitations of different application styles and types. Evolution of applications as responses to social computing challenges. Information and organizational systems co-development.

0101	Yla Tausczik	Seats (Total: 30)
	Tu 2:00pm - 4:45pm	HBK 0109

INST742 **Implementing Digital Curation**

Credits: 3 Grading Method: Regular

Prerequisite: INST604; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Management of and technology for application of digital curation principles in specific settings. Characteristics, representation, conversion, and preservation of digital objects. Application of standards for digitization, description, and preservation. Planning for sustainability, risk mitigation and disaster recovery.

A Partnership for Action Learning in Sustainability (PALS) course where students apply classroom learning to actual community needs.

0101	Jesse Johnston	Seats (Total: 30)
	Th 6:00pm - 8:45pm	HBK 4113

INST746 **Digitization of Legacy Holdings**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INST604. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST728B or INST746. Formerly: INST728B.

Through hands on exercises and real-world projects, students will learn how to incorporate digitization of analog holdings into an existing archival program and how to link records of different formats and from different collections together.

0101	Kenneth Heger	Seats (Total: 20)
	W 2:00pm - 4:45pm	HBK 4110

INST747 **Research in Advanced Digital Curation**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INST604; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST728L or INST747. Formerly: INST728L.

Students will build their ability to understand the complexity of research strategies and apply tools involved in the management and use of digital information in the Age of Big Data. The class will contain class lectures, class discussions, assigned readings, and extensive hands-on experience with student experience in digital curation projects. The research projects are focused around six major themes that will engage students in multiple arenas of research in Big Data. These are: community displacement, refugee narratives, movement of people, citizen internment, racial zoning, and cyberinfrastructure for digital curation. Project participants will have the opportunity to work with external stakeholders.

0101	Richard Marciano, Kenneth Heger	Seats (Total: 30)
	Tu 2:00pm - 4:45pm	HBK 4110

INST762 **Visual Analytics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INFM603 or INST630; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST728Q OR INST762. Formerly: INST728Q.

Visual analytics is the use of interactive visual interfaces to facilitate analytical reasoning. In essence, visual analytics is based on the--not uncontroversial--idea that humans and computers working alone are insufficient for the data challenges of today and tomorrow, and that effective synthesis of both humans and computational algorithms are needed to create human-in-the-loop systems. Thus, visual analytics bridges human-centered disciplines such as visualization and human-computer interaction with computation-centered disciplines such as machine learning, probabilistic methods, and knowledge discovery. The course contents will include both theoretical foundations of this interdisciplinary science as well as practical applications of integrated visual analysis techniques on real-world problems.

0101	Niklas Elmqvist	Seats (Total: 30)
	Th 2:00pm - 4:45pm	AJC 2134

INST765 **Programming on the Web**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INFM603, LBSC690, LBSC671, or INST733; or permission of instructor. Credit only granted for: INFM743 or INST765. Formerly: INFM743.

Non-programmers will learn basic programming and how to develop familiarity with web formatting and programming paradigms, including XML, REST, APIs, and authentication schemes. The class begins with an introduction to basic programming and students build on those skills by programming applications that use web-based data and services.

0101	David Patrick	Seats (Total: 30)
	Th 6:00pm - 8:45pm	JMZ 2122

INST767 **Big Data Infrastructure**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INST737; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Principles and techniques of data science and business intelligence. Technologies and architectures for large-scale data warehousing and scale-out data analytics platforms. Supervised and unsupervised data mining.

0101	David Loshin	Seats (Total: 35)
	M 6:00pm - 8:45pm	HBK 0105

INST776 **HCIM CAPSTONE PROJECT**

Credits: 3 Grading Method: Regular

Prerequisite: INST775; or permission of instructor. Restriction: Must be taken in the semester immediately following completion of INST775 HCIM Capstone Prep; and permission of INFO-College of Information Studies.

The opportunity to apply the skills learned through coursework in a semester-long project applied to a real -world problem. Capstone projects may follow the design, prototyping and evaluation process from end-to-end or may focus on a subset of elements in that process, such as formative study and design.

0101	Bill Kules	Seats (Total: 30)
	M 1:00pm - 5:00pm	HBK 2119
	Th 6:00pm - 8:45pm	HBK 2119

INST785 **Documentation, Collection, and Appraisal of Records**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INST604; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC785 OR INST785. Formerly: LBSC785.

Development of documentation strategies and plans; collecting policies to guide programs in acquiring records; theories and techniques for appraising records to identify those with continuing value.

0101	Ricardo Punzalan	Seats (Total: 30)
	Tu 6:00pm - 8:45pm	HBK 0105

INST794 **Capstone in Youth Experience**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INST650, INST651, and INST652; or permission of instructor. Restriction: Permission of INFO-College of Information Studies; and must be part of Youth Experience (YX) certificate program.

Through a supervised project, to synthesize design thinking, participatory design, connected learning, and learning theory/frameworks students will produce a technology-infused program for and with youth. Students will develop and carry out a project with a community partner through their library system. The project must incorporate technology and design thinking, and must be based on one or more learning theory/frameworks. Through the course, students will learn many practical skills related to planning and implementation of a technology-infused programming at or through their library, including marketing, fundraising, budgeting, legal issues, logistical issues, developing and sustaining community partnerships, developing engaging experiences for youth, and creating and analyzing learning assessments.

Course is restricted to students admitted to the Youth Experience (YX) Certificate Program.

CT01	Linda Braun	Seats (Total: 15)
	Meets March 4, 2019 - May 27, 2019	
	Class time/details on ELMs	ONLINE

INST799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

INST808 **Seminar in Research Methods and Data Analysis**

Credits: 3 Grading Method: Regular, Audit

Topics and issues in information studies research. Design and conduct of research project.

INST 808 is a seminar course that covers different topics within research methods and analysis. In the Fall 2019 term, we will focus on conducting qualitative research to understand behavioral and social aspects of technology use and inform technology design. The course will include a focus on study design, data collection, and analysis. Students will engage in a hands-on project involving qualitative data collection and analysis that culminates in a research paper about a topic of their choice. After successfully completing this course students will be able to: Read, interpret, and evaluate qualitative resarch. Identify appropriate methodological approaches for different research topics. Collect qualitative data through robust research strategies. Analyze qualitative data. Present reports of qualitative research.

0101	Amanda Lazar	Seats (Total: 40)
	W 2:00pm - 4:45pm	CHE 2136

INST809 **Individualized Teaching Experience**

Credits: 3-5 Grading Method: Regular, Audit

Introduction to the techniques and challenges associated with design, delivery, and evaluation of couses offered at the University level. The doctoral student will work one-on-one with a faculty member in the development and co-teaching of a graduate level course.

0201	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0301	Brian Butler Contact instructor or department for details.	Seats (Total: 3)
0401	Michael Kurtz Contact instructor or department for details.	Seats (Total: 3)
0501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0601	Vedat Diker Contact instructor or department for details.	Seats (Total: 5)
0701	Kenneth Heger Contact instructor or department for details.	Seats (Total: 5)
0801	Douglas Oard Contact instructor or department for details.	Seats (Total: 5)
0901	Ricardo Punzalan Contact instructor or department for details.	Seats (Total: 3)
1101	Paul Jaeger Contact instructor or department for details.	Seats (Total: 5)
1301	Jennifer Golbeck Contact instructor or department for details.	Seats (Total: 5)
1401	Kari Kraus Contact instructor or department for details.	Seats (Total: 5)
1501	Beth St Jean Contact instructor or department for details.	Seats (Total: 5)
1601	Vanessa Frias-Martinez Contact instructor or department for details.	Seats (Total: 5)
1701	John Bertot Contact instructor or department for details.	Seats (Total: 4)

1801	Ping Wang Contact instructor or department for details.	Seats (Total: 5)
1901	Kathy Weaver Contact instructor or department for details.	Seats (Total: 5)
2001	Katy Lawley Contact instructor or department for details.	Seats (Total: 5)
2101	Katie Shilton Contact instructor or department for details.	Seats (Total: 5)
2201	Leah Findlater Contact instructor or department for details.	Seats (Total: 5)
2401	Jessica Vitak Contact instructor or department for details.	Seats (Total: 5)
2501	Taverekere Srikantaiah Contact instructor or department for details.	Seats (Total: 5)
2601	Niklas Elmqvist Contact instructor or department for details.	Seats (Total: 5)
2701	Mega Subramaniam Contact instructor or department for details.	Seats (Total: 3)
2901	Susan Winter Contact instructor or department for details.	Seats (Total: 5)
3001	Richard Marciano Contact instructor or department for details.	Seats (Total: 5)
3101	Yla Tausczik Contact instructor or department for details.	Seats (Total: 5)
4301	Ursula Gorham-Oscilowski Contact instructor or department for details.	Seats (Total: 5)
4501	Tamara Clegg Contact instructor or department for details.	Seats (Total: 5)

INST810 Individual Research Experience

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: INST810 or LBSC810. Formerly: LBSC810.

Pre-candidacy individual research experience directed by a faculty member.

0101	Jennifer Preece Contact instructor or department for details.	Seats (Total: 5)
0201	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0301	Brian Butler Contact instructor or department for details.	Seats (Total: 5)
0401	Michael Kurtz Contact instructor or department for details.	Seats (Total: 5)
0501	Amanda Lazar Contact instructor or department for details.	Seats (Total: 5)
0601	Vedat Diker Contact instructor or department for details.	Seats (Total: 5)
0701	Kenneth Heger Contact instructor or department for details.	Seats (Total: 5)
0801	Douglas Oard Contact instructor or department for details.	Seats (Total: 5)
0901	Ricardo Punzalan Contact instructor or department for details.	Seats (Total: 5)
1101	Paul Jaeger Contact instructor or department for details.	Seats (Total: 5)
1301	Jennifer Golbeck Contact instructor or department for details.	Seats (Total: 5)
1401	Kari Kraus Contact instructor or department for details.	Seats (Total: 5)
1501	Beth St Jean Contact instructor or department for details.	Seats (Total: 5)

1601	Vanessa Frias-Martinez Contact instructor or department for details.	Seats (Total: 5)
1701	John Bertot Contact instructor or department for details.	Seats (Total: 5)
1801	Ping Wang Contact instructor or department for details.	Seats (Total: 5)
1901	Kathy Weaver Contact instructor or department for details.	Seats (Total: 5)
2001	Katy Lawley Contact instructor or department for details.	Seats (Total: 5)
2101	Katie Shilton Contact instructor or department for details.	Seats (Total: 5)
2201	Leah Findlater Contact instructor or department for details.	Seats (Total: 5)
2401	Jessica Vitak Contact instructor or department for details.	Seats (Total: 4)
2501	Taverekere Srikantaiah Contact instructor or department for details.	Seats (Total: 5)
2601	Niklas Elmqvist Contact instructor or department for details.	Seats (Total: 5)
2701	Mega Subramaniam Contact instructor or department for details.	Seats (Total: 4)
2901	Susan Winter Contact instructor or department for details.	Seats (Total: 5)
3001	Richard Marciano Contact instructor or department for details.	Seats (Total: 5)
3101	Yla Tausczik Contact instructor or department for details.	Seats (Total: 5)
4301	Ursula Gorham-Oscilowski Contact instructor or department for details.	Seats (Total: 5)

4501	Tamara Clegg	Seats (Total: 5)
	Contact instructor or department for details.	

INST888 **Doctoral Seminar**

Credits: 3 Grading Method: Regular, Audit

Advanced seminar on selected topics in information studies.

0101	Joel Chan	Seats (Total: 15)
	M 2:00pm - 4:45pm	HBK 4113

INST898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

INST899 **Doctoral Dissertation Research**

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ISRL Israel Studies Spring 2019

ISRL249G **Selected Topics in Israel Studies; Introduction to Jewish Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU, DVUP

Topics in the study of Zionism and contemporary Israel from the 1880's to the present. Future offerings may address history, politics, or culture.

Also offered as JWST272 and CMLT242. Credit only granted for JWST272, CMLT242, or ISRL249G. A survey of Jewish literature and introduction to methods of reading literature in general and Jewish literature in particular. Concern with what makes a literary corpus Jewish and other issues of canonicity. All texts in English translation.

0101	Adi Mahalel	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm Class time/details on ELMs	TYD 1108 ONLINE

ISRL249K **Selected Topics in Israel Studies; Gender and Sexuality in Israeli Cinema**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVUP

Topics in the study of Zionism and contemporary Israel from the 1880's to the present. Future offerings may address history, politics, or culture.

Also offered as FILM298K, JWST219B, WMST298T, and LGBT298T. Credit only granted for ISRL249K, JWST219B, FILM298K, WMST298T, or LGBT298T. This course will explore the different ways gender and sexuality have been represented in Israeli Cinema over time. We will examine notions of "manhood" and "womanhood" within the Israeli social context, as well as look at examples of outliers, exceptions, transgressors, and pariahs. We will investigate different types of representations of gender and sexuality, asking how they configure secular society, the Orthodox/ Haredi religious community, the LGBTQ community, the Arab/Palestinian communities, the Israeli soldier population, and more.

0101	Shalom Rosenberg TuTh 3:30pm - 4:45pm	Seats (Total: 25) TWS 1321

ISRL249L **Selected Topics in Israel Studies; Israeli Innovation and Entrepreneurship**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Topics in the study of Zionism and contemporary Israel from the 1880's to the present. Future offerings may address history, politics, or culture.

Also offered as HEBR249E. Credit only granted for HEBR249E or ISRL249L. Prerequisite: HEBR207. Taught in Hebrew. Focus on present-day and historical authentic materials such as media clips and articles, advertising, podcasts, and interviews that explain Israel's reputation as a leader in innovation and a "start-up nation." Students will produce oral and written business plans. This is a CourseShare online course open to students from other BTAA campuses. Please contact the instructor, Dr. Avital Karpman, with any questions you may have: akarpman@umd.edu.

0101	Avital Karpman Class time/details on ELMs	Seats (Total: 25) ONLINE
0201	Avital Karpman Class time/details on ELMs	Seats (Total: 25) ONLINE

ISRL329D **Special Topics in Israel Studies; Understanding the Israeli-Palestinian Conflict through Opposing Histories**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Topics in the study of Zionism and contemporary Israel from the 1880's to the present at an intermediate level. Individual sections may address history, politics, or culture.

Not open to students who have taken ISRL289I. Also offered as HIST329D. Credit granted for ISRL329D or HIST329D. Israelis and Palestinians have been fighting over the Land of Palestine/Israel for over a century, but both sides date their relationship to the Land back many centuries, even millenia. We will look at the history but especially the "narratives" that the two sides employ to explain and justify, both to themselves and others, their claims to the land, and how these narratives have both molded the shape of the conflict and been molded by it, and changed over time. This is not solely a history course, though it will cover the relevant history. It will focus on the importance of narratives to the continuation of the conflict, as well as elements relating to identity, religion, archaeology, morality, and human rights. No previous knowledge is expected, but those with such knowledge will find it useful.

0101	Paul Scham	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	JMZ 0208

ISRL342 **History of Modern Israel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as: HIST376. Credit only granted for: HIST376 or ISRL342.

History of modern Israel since the beginning of the Zionist settlement in 1882. Attention to different interpretations and narratives of Israel's history, including the historical and ideological roots of Zionism, the establishment of the State of Israel, ideological forces, wars, and the triumphs and crises of democracy.

0101	Yoram Peri	Seats (Total: 60)
	MW 3:30pm - 4:45pm	TYD 0102

ISRL343 **Global Migration and the Israeli Case Study**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DVUP

Credit only granted for: ISRL349K, GVPT368G, SOCY398G, SOCY398I, or ISRL343. Formerly: ISRL349K.

Over 70% of Israel's population is made of first, second or third generation immigrants, who came from over 70 countries, making Israel an ultimate immigrant society. This course will focus on the history of Israel as a case study for the understanding of the historical phenomena of modern immigration.

Also offered as SOCY398G.

0101	Pnina Peri	Seats (Total: 35)
	MW 2:00pm - 3:15pm	BPS 0283

ISRL349J **Investigating Topics in Israel Studies; Theories of Nation Building: Israel as a Case Study**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Topics in the study of Zionism and contemporary Israel from the 1880's to the present at an intermediate level. Individual sections may address history, politics, or culture.

Also offered as SOCY398V. Credit only granted for ISRL349J or SOCY398V. Since Israel was established in 1948, the education system has played a major role in developing the Israeli identity. We will examine dominant discourses and debates pertaining to Israeli culture identity, such as the centrality of the Holocaust, security issues, minorities, religious education, role of literature in national narrative, the role of politics in citizenship education and contemporary debates over History education.

0101	Pnina Peri MW 3:30pm - 4:45pm	Seats (Total: 35) BPS 0283

ISRL349Z **Investigating Topics in Israel Studies; Beyond Black and White: Jews and Representations of Race**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Topics in the study of Zionism and contemporary Israel from the 1880's to the present at an intermediate level. Individual sections may address history, politics, or culture.

Also offered as JWST319M. Credit only granted for ISRL349Z or JWST319M. An examination of Western constructions and representations of 'race' from medieval times to the modern rise of Zionism and the founding of Israel, with a focus on how Jews utilized the racial discourses of each period to negotiate their position within Western history.

0101	Shirelle Doughty Class time/details on ELMs	Seats (Total: 40) ONLINE
0102	Shirelle Doughty Class time/details on ELMs	Seats (Total: 30) ONLINE

ISRL369C **Special Topics in Study Abroad; Israeli Society in Israeli Cinema**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ISRL369I **Special Topics in Study Abroad; Socio-Economic, Political, Religious, and Ethnic Conflicts in Israel, and the Search For Common Ground**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ISRL448V **Seminar in Israel Studies; The New Theater of Terror: Online Terrorism**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Intensive study of an Israel Studies topic. Expected work product is a substantial research or analysis paper or appropriate equivalent.

This course examines the relationships between modern terrorists and the new media, how terrorists use the online platforms, how democracies can respond to the challenge, and what are the prices of various measures. Also offered as BSST338Y. Credit granted for BSST338Y or ISRL448V.

0101	Gabriel Weimann	Seats (Total: 25)
	Meets March 25, 2019 - May 13, 2019	
	MW 3:00pm - 5:45pm	HBK 1112

ITAL Italian Spring 2019

Students with no experience in the language are invited to register for ITAL103.

ITAL103 **Intensive Elementary Italian**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Not open to fluent/native speakers of Italian. Credit only granted for: ITAL103 or ITAL121.

Covers speaking, reading, writing, listening, and culture of Italian-speaking world.

0101	Adelina Fantoni	Seats (Total: 20)
	TuTh 9:30am - 10:45am W 10:00am - 10:50am	JMZ 3203 KEY 1117
0201	Adelina Fantoni	Seats (Total: 20)
	TuTh 11:00am - 12:15pm W 11:00am - 11:50am	JMZ 1124 KEY 1117

0301	Joseph Falvo	Seats (Total: 20)
	MW 2:00pm - 3:15pm	JMZ 3203
	F 2:00pm - 2:50pm	JMZ 3203

ITAL121 **Accelerated Italian I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Credit only granted for: ITAL103 or ITAL121.

An intensive beginning course in Italian language skills: guided practice in reading, writing, understanding and conversation, to enable the student to move more quickly to advanced courses. Restricted to students already having a good background in at least one other foreign language. When taken with ITAL122, may be used to satisfy language requirement.

Contact department for information to register for this course.

ITAL122 **Accelerated Italian II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: ITAL121; or must have appropriate Foreign Language Placement Test (FLPT) score. Credit only granted for: ITAL203 or ITAL122.

Continuation of ITAL121. Completion of accelerated cycle. May be used to satisfyARHU Global Engagement requirement.

Also offered as ITAL122H. Credit granted for ITAL122 or ITAL122H.

Contact department for information to register for this course.

ITAL122H **Accelerated Italian II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: ITAL121; or must have appropriate Foreign Language Placement Test (FLPT) score. Credit only granted for: ITAL203 or ITAL122.

Continuation of ITAL121. Completion of accelerated cycle. May be used to satisfyARHU Global Engagement requirement.

For general honors students only. Also offered as ITAL122. Credit granted ro ITAL122 or ITAL122H.

Contact department for information to register for this course.

ITAL169B **Special Topics in Study Abroad I; Intensive Elementary Italian**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL169C **Special Topics in Study Abroad I; Italian Conversation**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL169E **Special Topics in Study Abroad I; Elementary Italian I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL169F **Special Topics in Study Abroad I; The Florence Experience I: Beginning Italian I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL169R **Special Topics in Study Abroad I; Introduction to Italian Language and Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL203 **Intensive Intermediate Italian**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: ITAL103; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not have completed ITAL122; and must not be a fluent/native speaker of Italian. Credit only granted for: ITAL203 or ITAL122.

Covers speaking, reading, writing, listening, and culture of Italian-speaking world.

0101	Adelina Fantoni	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm W 2:00pm - 2:50pm	JMZ 1124 JMZ 1117

ITAL204 **Review Grammar and Composition**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: ITAL203 or ITAL122; or must have appropriate Foreign Language Placement Test (FLPT) score.

An intensive review of major aspects of contemporary grammatical usage; training in comprehension; an introduction to guided composition.

0101	Stefania Amodeo	Seats (Total: 14)
	MWF 11:00am - 11:50am	JMZ 3203

ITAL207 **Reading and Writing in Italian**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Prerequisite: ITAL204; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a fluent/native speaker of Italian.

Culture-based, process approach to reading and writing in Italian; selected grammatical topics.

Contact department for information to register for this course.

ITAL252 **Stories of Italy**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ITAL207; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not be a fluent/native speaker of Italian. Additional information: .

Introduction to fictions across time and space in Italy.

0101	Stefania Amodeo	Seats (Total: 20)
	MWF 1:00pm - 1:50pm	JMZ 1117

ITAL269D **Special Topics in Study Abroad II; Advanced Italian**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL269I **Special Topics in Study Abroad II; Intensive Intermediate Italian I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL269M **Special Topics in Study Abroad II; A City with a View: Modern Italy through France**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL269R **Special Topics in Study Abroad II; Elementary Italian I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL269T **Special Topics in Study Abroad II; Intermediate Italian II**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL301 **Italian Composition**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ITAL207; or students who have taken courses with comparable content may contact the department.

Techniques of composition; grammatical analysis; various genres; vocabulary.

0101	Stefania Amodeo	Seats (Total: 20)
	MWF 10:00am - 10:50am	JMZ 3203

ITAL311 **Advanced Oral Expression: Current Events**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ITAL211; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Oral expression; development of idiomatic forms and vocabulary to level of the Italian press.

Contact department for information to register for this course.

ITAL362 **Survey of Italian Society and Culture: From the 1980s to thePresent Day**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ITAL207; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Development of Italian society and culture from the 1980s to the present. Literature, cinema, economy, popular culture, daily life. Taught in Italian.

Contact department for information to register for this course.

ITAL369B **Special Topics in Study Abroad III; The History of Culture and Food in Italy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL369F **Special Topics in Study Abroad III; Florence: The Story of the City**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL369W **Special Topics in Study Abroad III; Composition and Style**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Prerequisite: Must have a Learning Proposal approved by the Office of Experiential Learning Programs, faculty sponsor, and student's internship sponsor. Restriction: Junior standing or higher.

Contact department for information to register for this course.

ITAL399 **Directed Study in Italian**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Intended for undergraduates who wish to work on an individual basis with a professor of their choice.

Contact department for information to register for this course.

ITAL399T **Directed Study in Italian; Italian Tutoring**

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Intended for undergraduates who wish to work on an individual basis with a professor of their choice.

2680	Adelina Fantoni	Seats (Total: 1)
	Contact instructor or department for details.	

ITAL421 **The Italian Renaissance**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ITAL421 or ITAL422.

A study of major trends of thought in Renaissance literature, art, and science. Taught in English.

0101	Joseph Falvo	Seats (Total: 25)
	MWF 12:00pm - 12:50pm	JMZ 1120

ITAL431 **Italian Civilization in Translation**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ITAL431 or ITAL432.

Political, social, intellectual, literary and artistic forces shaping contemporary Italy from the late Middle Ages to the present. Taught in English.

Contact department for information to register for this course.

ITAL436 **Italian Cinema I: Neorealism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as: FILM441. Credit only granted for: FILM441 or ITAL436.

Explores representations of Italy in cinema with special focus on identity formation and the movement of Italian neorealism and post neorealism. Taught in English.

Contact department for information to register for this course.

ITAL469I **Study Abroad Special Topics IV; Diversity in Italy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

ITAL475 **The Italian Opera Libretto in English**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed one course in literature. Credit only granted for: ITAL475 or ITAL476.

History and analysis of Italian opera librettos from Monteverdi through Mozart to Verdi and Puccini. Taught in English.

Also offered as MUSC448L. Credit will be granted for ITAL475 or MUSC448 L.

Contact department for information to register for this course.

ITAL478J **Colloquium in Italian; Terrorism and Political Violence in Italy**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Colloquium section taught in Italian to accompany 400-level Italian courses taught in English. Discussion, presentations, readings.

0101	Mauro Resmini	Seats (Total: 5)
	Th 5:00pm - 5:50pm	JMZ 2123

ITAL478R **Colloquium in Italian; Italian Renaissance**

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Colloquium section taught in Italian to accompany 400-level Italian courses taught in English. Discussion, presentations, readings.

0101	Joseph Falvo W 1:00pm - 1:50pm	Seats (Total: 5) JMZ 1123

ITAL499 **Special Topics in Italian Studies**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

ITAL499J **Special Topics in Italian Studies; Terrorism and Political Violence in Italy**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

0101	Mauro Resmini TuTh 2:00pm - 3:15pm	Seats (Total: 25) JMZ 2122

JAPN Japanese Spring 2019

JAPN102 **Elementary Japanese II**

Credits: 6

Grading Method: Regular

Prerequisite: Minimum grade of C- in JAPN101; or appropriate Foreign Language Placement Test (FLPT) score.

Continued introduction to the basic spoken patterns of contemporary Japanese.

0101	Etsuko Yamakita, Robert Del Greco MWF 10:00am - 10:50am TuTh 9:30am - 10:45am	Seats (Total: 15) JMZ 1215 JMZ 1224
0201	Etsuko Yamakita, Robert Del Greco MWF 11:00am - 11:50am TuTh 11:00am - 12:15pm	Seats (Total: 15) JMZ 1215 JMZ 2125
0301	Etsuko Yamakita, Robert Del Greco MWF 2:00pm - 2:50pm TuTh 2:00pm - 3:15pm	Seats (Total: 15) JMZ 1215 JMZ 1224

JAPN202 **Intermediate Japanese II**

Credits: 6 Grading Method: Regular CORE: HO

Prerequisite: Minimum grade of C- in JAPN201; or appropriate Foreign Language Placement Test (FLPT) score.

Contemporary spoken and written Japanese.

0101	Kumiko Akikawa MWF 11:00am - 12:50pm	Seats (Total: 15) JMZ 2125
0201	Kumiko Akikawa MWF 1:00pm - 2:50pm	Seats (Total: 15) JMZ 2125

JAPN302 **Advanced Japanese II**

Credits: 6 Grading Method: Regular

Prerequisite: Minimum grade of C- in JAPN301; or permission of instructor.

Continued readings in varied modern texts and advanced conversation and oral comprehension.

0101	Makiko Inoue MWF 11:00am - 12:50pm	Seats (Total: 15) JMZ 3118
0201	Makiko Inoue MWF 1:00pm - 2:50pm	Seats (Total: 15) JMZ 3118

JAPN386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Must have a Learning Proposal approved by the Office of Experiential Learning Programs, faculty sponsor, and student's internship sponsor. Restriction: Junior standing or higher.

Contact department for information to register for this course.

JAPN401 **Readings in Modern Japanese Literature**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in JAPN302; or permission of instructor.

Development of advanced reading, vocabulary, grammar, and translation skills through selected readings in Japanese drawn primarily from modern literature.

Prerequisite: Minimum grade of C- in JAPN302; or equivalent FLPA

0101	Jyana Browne	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	JMZ 3118

JAPN407 **The Art of Translation**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in JAPN401; or students who have taken courses with comparable content may contact the department.

Theory and practice of translation. Variety of genres. Japanese to English.

Contact department for information to register for this course.

JAPN438A **Topics in Japanese Pragmatics; Stylistic Variation in the Films of Miyazaki Hayao and Studio Ghibli**

Credits: 3 Grading Method: Regular

Basic concepts in the field of pragmatics (the study of language in context) such as deixis and indexicality, speech acts, ellipsis, and politeness. Readings in English on English and Japanese examples.

Credit only granted for JAPN 438A, JAPN 438M, or JAPN 438P. Prerequisite: C- or better in JPAN201 or FLPA. This course fulfills the linguistics elective requirement for the JAPN major and minor. This course explores topics in the field of linguistic pragmatics (the study of language use in context) with a focus on stylistic variation in the films of Miyazaki Hayao and Studio Ghibli. This is not a film course that addresses non-linguistic elements of Miyazaki's anime. We begin with an introduction to pragmatic concepts such as deixis (how language indexes social, temporal, and spatial relationships), speech acts (how utterances function as requests, orders, apologies, invitations, etc.), and linguistic politeness. Readings, class discussions, quizzes, and homework assignments will first address these concepts through English examples, and subsequently apply them to excerpts drawn from Miyazaki's works, with special attention to how the linguistic behavior of a character contributes to his or her overall portrayal in a film. Our discussions will include comparisons of English translations in film dubbings and subtitles with the original Japanese in order to consider how various speech acts may be conveyed inthe two languages. We conclude with individual multimedia projects developed and presented by the students.

0101	Lindsay Yotsukura	Seats (Total: 20)
	MW 2:00pm - 3:15pm	JMZ 1224

JAPN498J **Special Topics in Japanese Studies; Performance and Sexuality in Early Modern Japan**

Credits: 3 Grading Method: Regular

Special topics in Japanese studies. Taught in English.

This course fulfills the literature/cultural studies elective requirement for the JAPN major and minor. Also offered as THET428J. Credit only granted for JAPN498J or THET428J. This course explores the intersections between performance and sexuality in early modern Japan. Our main sites will be the stage, the brothels, and everyday life as we examine how people of the period performed gender and sexuality. We will draw from popular fiction, kabuki, puppet theatre, woodblock prints, guides to the pleasure quarters, and censorship edicts. Taught in English. This course fulfills the literature or elective requirement for the Japanese major or minor.

0101	Jyana Browne	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	JMZ 2206

JAPN498K **Special Topics in Japanese Studies; Modern Japanese Literature from Pure to Pop: Problematizing Genre and Canon**

Credits: 3 Grading Method: Regular

Special topics in Japanese studies. Taught in English.

This course fulfills the literature/ cultural studies elective requirement for the JAPN major and minor. What makes some Japanese literature "great" or "classic" or just worth reading? Why has literature aimed at popular audiences often been disregarded by elite institutions? This course will critically examine the so-called "canon" of modern Japanese literature and several of the main literary genres that comprise it. Our class discussions will focus primarily on the 20th century. Students will learn about the major literary movements of modern Japan and consider various approaches to the analysis of that literature and its reception. Specific topics will include: Meiji social reforms, naturalism, autobiographical fiction, thesupernatural, mysteries/crime fiction, and the reception of Japanese literature in the West. Films will be integrated as a major element of the course. All readings and class discussion are in English.

0101	Robert Del Greco	Seats (Total: 30)
	MW 3:30pm - 4:45pm	JMZ 0208

JAPN499 **Directed Study in Japanese**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Contact department for information to register for this course.

JOUR Journalism Spring 2019

JOUR130 **Self-Presentation in the Age of YouTube**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSOC

Credit only granted for: COMM107, COMM200, ENES143, INAG110, JOUR130 or THET285.
Additional information: May not count toward the Journalism major.

Students, as they make use of evolving technologies, need to be able to present themselves effectively in front of any number of different audiences through any number of different outlets. Whether in an interview on radio, a guest presentation at a conference, in comments on a video blog, in commentary on TV, in the lead on a self-produced YouTube video, or as spokesperson in front of investors or management, professionals need strong oral communication skills. This class focuses on strengthening those skills through active individual and group presentations, as well as, through discussion of key techniques and group critique of presentation publicly available in the social media space on sites such as YouTube.

0101	Renee Poussaint TuTh 5:00pm - 6:15pm	Seats (Total: 22) KNI 1103
0201	Hamil Harris TuTh 12:30pm - 1:45pm	Seats (Total: 22) KNI 1206

JOUR150 **Introduction to Mass Communication**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS, DSSP

Additional information: Not applicable toward journalism major.

Survey of the functions and effects of the mass media in the United States. A consumer's introduction to newspapers, television, radio, film, sound recording, books, magazines, and new media technology.

0101	Edward Alwood TuTh 11:00am - 12:15pm	Seats (Total: 35) KNI 1208
0201	Edward Alwood TuTh 12:30pm - 1:45pm	Seats (Total: 30) KNI 1105
0301	Denitsa Yotova Class time/details on ELMs	Seats (Total: 35) ONLINE
0401	Denitsa Yotova Class time/details on ELMs	Seats (Total: 35) ONLINE
0501	Nandikoor Bhat Class time/details on ELMs	Seats (Total: 35) ONLINE

JOUR152 **Introduction to Storytelling with Code**

(Perm req)

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in JOUR200.

An introduction to the ways markup and programming languages and computational thinking are transforming news reporting and storytelling.

Attendance is required on the first day of class and last day of class.

0101	Sean Mussenden **Meets January 28, 2019 - March 15, 2019** F 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 70) KNI 1208 ONLINE
0201	Adam Marton **Meets March 25, 2019 - May 14, 2019** F 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 70) KNI 1208 ONLINE

JOUR175 **Media Literacy**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: IE, D	General Education: DSSP, DVUP

Additional information: Not applicable toward journalism major.

An analysis of the information, values and underlying messages conveyed via television, newspapers, the internet, magazines, radio and film. Examines the accuracy of those messages and explores how media shape views of politics, culture and society.

0101	Susan Moeller Class time/details on ELMs *Mandatory synchronous online meetings 6:30-7:30pm on 1/28, 2/25, 4/1, 4/29. Online, real-time ELMS Chat office hours Tuesdays 9:30-10:30am.*	Seats (Total: 60) ONLINE
0201	Sohana Nasrin TuTh 2:00pm - 3:15pm	Seats (Total: 35) CSI 1122
0301	Bobbie Foster TuTh 2:00pm - 3:15pm	Seats (Total: 35) CHM 1224
0401	Sholpan Kozhamkulova TuTh 2:00pm - 3:15pm	Seats (Total: 35) CSI 3120

0501	Hazel Feigenblatt	Seats (Total: 35)
	Class time/details on ELMs	ONLINE
	Mandatory synchronous online meetings 6:30-7:30pm on 1/28, 2/25, 4/1, 4/29.	

JOUR181 **Grammar for Journalists**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: ENGL181, ENGL281, or JOUR181.

The basic grammatical structures of standard American written English and its conventions of punctuation, diction and usage in journalistic writing.

0101	Linda Coleman	Seats (Total: 144)
	W 2:00pm - 2:50pm	BPS 1250
0201	Linda Coleman	Seats (Total: 70)
	W 12:30pm - 1:20pm	KNI 1208

JOUR199 **Survey Apprenticeship**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

College-monitored experience in approved mass-communications organizations and industries.

Prerequisite: permission of department. Repeatable to 6 credits if content differs. Students must meet with the Internship Director in KNI 1100 to receive permission to register. No requests to register after the Schedule Adjustment Period will be honored.

0101	Adrianne Flynn	Seats (Total: 35)
	Contact instructor or department for details.	

JOUR200 **Journalism History, Roles and Structures**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Introduction to the study of journalism from the standpoint of media history and sociology.

0101	Carole Lee	Seats (Total: 33)
	MW 9:30am - 10:45am	KNI 3202

0201	Ira Chinoy TuTh 9:30am - 10:45am	Seats (Total: 33) KNI 1208

JOUR201 **News Writing and Reporting I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ENGL101, JOUR181, and JOUR200; and permission of JOUR-Philip Merrill College of Journalism. Restriction: For students intending to be journalism majors; and permission of JOUR-Philip Merrill College of Journalism.

Introduction to news for the print and electronic media, development of new concepts: laboratory in news-gathering tools and writing skills. Students who earned 80% or higher on the JOUR181 diagnostic are exempt from the JOUR181 prerequisite.

For students intending to be journalism majors.

0101	Jerry Zremski TuTh 8:00am - 9:50am	Seats (Total: 18) KNI 1101
0201	Judith Havemann TuTh 12:00pm - 1:50pm	Seats (Total: 18) KNI 1101
0301	Matthew Laslo MW 7:00pm - 8:50pm	Seats (Total: 18) KNI 1101
0401	Merrilee Cox MW 10:00am - 11:50am	Seats (Total: 18) KNI 2103
0501	Joseph Weber MW 7:00pm - 8:50pm	Seats (Total: 18) KNI 2105
0601	Fulvio Cativo TuTh 7:00pm - 8:50pm	Seats (Total: 18) KNI 1101
0701	Rona Kobell MW 5:00pm - 6:50pm	Seats (Total: 18) KNI 2107
0801	Lisa Lednicer TuTh 2:00pm - 3:50pm	Seats (Total: 18) KNI 1101

0901	Ledyard King MW 8:00am - 9:50am	Seats (Total: 18) KNI 2107

JOUR202 **News Editing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR201. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism.

Copy editing, fact checking, verification and research across media platforms, including social, with consideration of story play and placement, graphic principles, headlines and SEO.

0201	Brian Cleveland MW 5:00pm - 6:50pm	Seats (Total: 18) KNI 1101
0301	Barbara Barrett MW 8:00am - 9:50am	Seats (Total: 18) KNI 2103

JOUR203 **Introduction to Multimedia Skills**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: JOUR201. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR203 or JOUR328G. Formerly: JOUR328G.

Examining the basics of producing and editing digital photos, video, and audio. Topics include: framing, lighting, and other aspects of composition; sequencing, using wide, medium, and tight shots; and ethical considerations when collecting sound and visuals.

0101	Shanaz Baksh F 10:00am - 12:45pm	Seats (Total: 18) KNI 1101
0301	Timothy Jacobsen W 4:00pm - 6:45pm	Seats (Total: 18) KNI 2103

JOUR262 **News Videography**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR203. Also offered as: JOUR603. Credit only granted for: JOUR262 or JOUR603.

Introduction to shooting, editing and production of video stories for broadcast and the Web; includes newsgathering in the field.

0101	Benjamin Worsley TuTh 7:00pm - 8:50pm	Seats (Total: 11) TWS 0222A
0201	Luke Rollins MW 7:00pm - 8:50pm	Seats (Total: 12) TWS 0222B
0301	Bethany Swain MW 10:00am - 11:50am	Seats (Total: 12) TWS 0222B
0401	Alanna Delfino TuTh 7:00pm - 8:50pm	Seats (Total: 12) TWS 0222B
0501	Harold Beiser TuTh 10:00am - 11:50am	Seats (Total: 12) TWS 0222A
0601	Karin Assmann MW 12:00pm - 1:50pm	Seats (Total: 12) TWS 0222A
0701	Alexander Glass MW 10:00am - 11:50am	Seats (Total: 12) TWS 0222A
0801	Bethany Swain MW 12:00pm - 1:50pm	Seats (Total: 4) TWS 0222B
1001	Joyce Koh MW 8:00am - 9:50am	Seats (Total: 12) TWS 0222A

JOUR289E **Media Law and Ethics in the Digital Age**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

This course is intended for non-journalism majors. Explore the First Amendment, libel, privacy, FOIA and copyright as they evolved in the digital news age of bloggers, tweeters, and citizen journalists. This course will cover fundamental legal and ethical concepts as well as practical application.

0101	Sandra Banisky TuTh 12:30pm - 1:45pm	Seats (Total: 70) KNI 1208

JOUR289F **Beyond Facebook: How Social Media are Transforming Society, Culture, Business and Politics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE | General Education: DSHU, SCIS

Examining the rise of social media and their impact on culture, business, government, politics, journalism and society, this course provides students with a broad contextual understanding of the multidisciplinary impacts of social media such as Twitter, Facebook and similar Internet-based services.

0201	Kalyani Chadha TuTh 9:30am - 10:45am	Seats (Total: 70) ESJ 0215

JOUR289J **Probing War: Investigative Narratives and American Conflicts**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL | General Education: DSHU, SCIS

0101	Christopher Hanson Tu 4:15pm - 7:00pm	Seats (Total: 30) KNI 1208

JOUR289P **Scandal: Exposing Corruption, Justice, and Vice in America**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Students will examine the nature and meaning of scandals in society: how they are uncovered and constructed; why some forms of wrongdoing are are considered scandalous but not others; how this definition has changed over time; and how scandals resonate in ways that reflect societal norms.

0101	Mark Feldstein W 2:00pm - 4:45pm	Seats (Total: 60) KNI 1208

JOUR300 **Journalism Ethics**

(Perm req)

Credits: 3 | Grading Method: Regular

Prerequisite: JOUR201. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism.

Examination of ethical problems in news writing and reporting.

0201	Merrilee Cox M 2:00pm - 3:15pm W 2:00pm - 3:15pm	Seats (Total: 35) KNI 1208 KNI 3202
0301	Kevin Klose MW 12:30pm - 1:45pm	Seats (Total: 35) KNI 3202

JOUR320 **News Writing and Reporting II: Multiplatform**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in JOUR201. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism.

Principles and practices of news reporting; covering news beats and other news sources, including researching news stories for accuracy, comprehensiveness and interpretation. Due to rigorous publication requirement, plan your schedule accordingly.

0101	Ed Waldman MW 7:00pm - 8:50pm	Seats (Total: 18) KNI 2107
0201	David Lightman MW 8:00am - 9:50am	Seats (Total: 18) KNI 2105
0301	Christine Harvey TuTh 9:30am - 11:20am	Seats (Total: 2) KNI 2103

JOUR325 **Capital News Service Bureau**

(Perm req)

Credits: 9 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: JOUR320; and permission of JOUR-Philip Merrill College of Journalism.

Advanced journalism training. Students report as part of college's Capital News Service program.

Washington, DC students should enroll in section 0101. Annapolis students should enroll in section 0201. College Park students should enroll in section 0301.

0101	James Carroll Contact instructor or department for details.	Seats (Total: 10)
0201	Karen Denny Contact instructor or department for details.	Seats (Total: 10)
0301	Adam Marton, Sean Mussenden Contact instructor or department for details.	Seats (Total: 10)
0401	Brooke Auxier Contact instructor or department for details.	Seats (Total: 8)

JOUR327 **Urban Affairs Reporting**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Prerequisite: JOUR320; and permission of instructor. Also offered as: JOUR627. Credit only granted for: JOUR327 or JOUR627.

Students are immersed in coverage of issues affecting cities, working on a semester-long multi-platform reporting project based in Baltimore.

Contact department for information to register for this course.

JOUR328F **Special Topics in News Writing and Reporting; National Security Reporting**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Advanced training and practice in writing and reporting news.

Prerequisite: JOUR320. Students will conduct in-depth, investigative reporting on a national security-related issue that will teach them to deepen their source-cultivation and rapport-building and their understanding of national security issues. As part of the course, they will also look at how Washington works and the importance of public affairs reporting in the democratic policy making process.

0101	Dana Priest	Seats (Total: 8)
	M 9:00am - 11:45am	KNI 3200

JOUR328R **Special Topics in News Writing and Reporting; Business Reporting**

(Perm req)

Credits: 3 | Grading Method: Regular

Advanced training and practice in writing and reporting news.

Prerequisite: JOUR320. This course will introduce students to the major themes in business and economic reporting and explore why this area of journalism continues to grow. Students will learn to understand the needs of business readers, identify newsworthy stories and interpret and integrate numbers and financial data into stories in a compelling way.

0101	Constance Ford	Seats (Total: 8)
	W 10:00am - 12:45pm	KNI 2107

JOUR352 **Interactive Design and Development**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR152; and JOUR201; and must have completed or be concurrently enrolled in JOUR262 or JOUR370. Or permission of JOUR-Philip Merrill College of Journalism. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism. Also offered as: JOUR652. Credit only granted for: JOUR352 or JOUR652.

Conceptualize, wireframe, design and build responsive Web pages using HTML, style sheets and other coding tools; work with open source interactive tools, JavaScript libraries, multimedia and text to create charts, timelines, maps and other forms of nonfiction storytelling.

0101	Adam Marton M 10:00am - 12:45pm	Seats (Total: 15) KNI 2107
0201	Gagan Nirula Th 7:00pm - 9:45pm	Seats (Total: 18) KNI 2105
0401	Alexander Pyles TuTh 5:00pm - 6:50pm	Seats (Total: 18) KNI 2103
0501	Leslie Walker M 2:00pm - 4:45pm	Seats (Total: 18) KNI 1101

JOUR353 **News Bureau: Multimedia Reporting**

(Perm req)

Credits: 6 Grading Method: Regular, Audit General Education: DSSP

Prerequisite: JOUR352; and permission of JOUR-Philip Merrill College of Journalism; and (JOUR320 or JOUR360).

Advanced reporting and writing in an online environment focusing on multimedia, non-traditional storytelling and investigative reporting.

Contact instructor to obtain permission.

0201	Karen Denny Contact instructor or department for details. *This section is for Annapolis students.*	Seats (Total: 8)
0301	James Carroll Contact instructor or department for details. *This section is for Washington DC students.*	Seats (Total: 9)

0401	Deborah Nelson Contact instructor or department for details. *This section is for Investigative Reporting students.*	Seats (Total: 8)
0501	Thomas Bettag Contact instructor or department for details. *Contact department or instructor for details. This section is for Field Producing students.*	Seats (Total: 8)

JOUR354 **Interactive Multimedia Storytelling**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR352. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism.

Advanced development of multimedia journalism, with emphasis on interactivity and application of new technologies, drawing on multiple sources, technologies and techniques to create interactive narratives.

0101	Ljiljana Ciric Hoffmann Tu 4:00pm - 6:45pm	Seats (Total: 9) TWS 0222B

JOUR355 **News Bureau: Multimedia Editing and Production**

(Perm req)

Credits: 6 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: JOUR320 or JOUR360; and JOUR352; and permission of JOUR-Philip Merrill College of Journalism.

Advanced online journalism training. Students work as multimedia and social media editors and producers, building interactive content and special reports.

0101	Sean Mussenden, Adam Marton Contact instructor or department for details.	Seats (Total: 8)
0201	Brooke Auxier Contact instructor or department for details.	Seats (Total: 8)

JOUR357 **Capital News Service Broadcast Immersion**

(Perm req)

Credits: 6 Grading Method: Regular, Audit

Prerequisite: JOUR361; and permission of JOUR-Philip Merrill College of Journalism.

Advanced broadcast journalism training. Students report as part of the College's Capital News Service program.

0101	Susan Katcef Contact instructor or department for details.	Seats (Total: 6)

JOUR360 **News Writing and Reporting II: Broadcast**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in JOUR201. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism.

Writing and reporting for broadcast media: production of news stories.

0101	Mary Burns, Cassandra Clayton, Susan Katcef TuTh 12:30pm - 1:45pm	Seats (Total: 18) KNI 2107
0301	Mary Burns, Susan Katcef, Cassandra Clayton TuTh 2:00pm - 3:15pm	Seats (Total: 10) KNI 2107

JOUR361 **Television Reporting and Production**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR262 and JOUR360.

Writing and editing for the broadcast media. Interpretive and documentary news stories.

Students will spend several hours per week on field assignments, in addition to scheduled class sessions.

0301	Alexandra Miller TuTh 7:00pm - 8:50pm	Seats (Total: 12) KNI 3210
0401	Joshua Davidsburg TuTh 10:00am - 11:50am	Seats (Total: 12) TWS 0222B

JOUR362 **Broadcast News Producing**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR262 and JOUR360; and must have completed or be concurrently enrolled in JOUR361.

Producing TV news.

0101	Cindy Wright Tu 7:15pm - 9:15pm W 2:00pm - 7:00pm	Seats (Total: 2) TWS 0117 TWS 0117	 Lab
0102	Cindy Wright Tu 7:15pm - 9:15pm Tu 2:00pm - 7:00pm	Seats (Total: 2) TWS 0117 TWS 0117	 Lab
0103	Cindy Wright Tu 7:15pm - 9:15pm Th 2:00pm - 7:00pm	Seats (Total: 2) TWS 0117 TWS 0117	 Lab

JOUR364 **Radio Broadcasting**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR360; and permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR364 or JOUR368R. Formerly: JOUR368R.

Students receive hands-on training in applying what they have learned about news reporting to the preparation of stories for, and the production of, a weekly radio program.

0101	Robert Little W 5:30pm - 8:15pm	Seats (Total: 10) TWS 0222A

JOUR367 **Broadcast News Bureau**

(Perm req)

Credits: 9

Grading Method: Regular, Audit

General Education: DSSP

Prerequisite: JOUR361; and permission of JOUR-Philip Merrill College of Journalism.

Advanced broadcast journalism training. Students report as part of the college's Capital News Service program.

0101	Susan Katcef Contact instructor or department for details.	Seats (Total: 10)

JOUR368D **Topics in Broadcast and Electronic Media; Social Media Content Creation, Audience Engagement and Analytics**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced research, analysis and/or practice of selected topics in broadcast journalism.

Prerequisite: JOUR320/JOUR360. This class will provide students with an overview of social media best practices for journalists, and will work to develop their skills in the following areas: social content creation, audience engagement, sourcing and verification, and analytics. By the end of this course, students will have the practical skills needed to manage a social media account for themselves (as student or professional journalists) or contribute to the management of a news organizations social media presence.

0101	Brooke Auxier	Seats (Total: 18)
	W 2:00pm - 3:15pm	KNI 2103
	Class time/details on ELMs	ONLINE

JOUR368K **Topics in Broadcast and Electronic Media; Video Innovation**

(Perm req)

Credits: 3

Grading Method: Regular

Advanced research, analysis and/or practice of selected topics in broadcast journalism.

Prerequisite: JOUR361 and permission of the instructor (jdavidsb@umd.edu). Students will explore the intersection between social media, video and a live broadcast by creating new and innovative ways to "broadcast" news to an audience. The class will encourage an entrepreneurial spirit and give students the opportunity to produce a show from scratch, with content aired on UMTV and online. In addition to creating television, students will support the broadcast arm of Capital News Service by managing volunteers, filling in on the studio staff and producing special projects and graphics when necessary.

0101	Joshua Davidsburg	Seats (Total: 9)
	Tu 12:00pm - 2:45pm	TWS 0222B

JOUR368V **Topics in Broadcast and Electronic Media; Advanced Video Storytelling**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Advanced research, analysis and/or practice of selected topics in broadcast journalism.

Prerequisite: JOUR361 and permission of instructor. Students will learn advanced storytelling, shooting and editing techniques for multi-platform video, using character-driven, natural sound packages to produce in-depth projects on a common theme.

0101	Bethany Swain M 2:45pm - 5:45pm	Seats (Total: 9) TWS 0222B

JOUR368Y **Topics in Broadcast and Electronic Media; Sports Producing**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced research, analysis and/or practice of selected topics in broadcast journalism.

Prerequisite: JOUR262 and JOUR360; or JOUR320. This class will take an analytical look at sports TV and sports content by deconstructing shows We will examine the producer's role in creating the look, feel and direction of shows and learn how to choose a lead story, how to "tease" and the importance of identifying and telling good stories. We will will watch live televised sporting events to better understand the techniques used by directors and producers. Students will get hands-on experience with BTN2GO and learn all aspects of live game production.

0101	Joseph Yasharoff W 7:00pm - 9:45pm	Seats (Total: 12) KNI 2103

JOUR370 **Photojournalism**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in JOUR201. Restriction: Permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR 368P, JOUR 370 or JOUR 670. Formerly: JOUR 368P. Additional information: Students are required to borrow, rent or purchase a 35mm digital camera. Contact department for camera specifications.

Examining the basics of shooting, editing and storytelling with still photos taken with 35mm digital cameras. Students shoot portraits, feature photos and action shots. Final project is a photo story/essay.

0101	Jaclyn Borowski F 10:00am - 12:45pm	Seats (Total: 12) KNI 2103
0201	Jonathan Sham M 7:00pm - 9:45pm	Seats (Total: 12) KNI 2103
0301	Timothy Jacobsen F 12:00pm - 2:45pm	Seats (Total: 12) KNI 2107
0401	Jon Soucy M 4:00pm - 6:45pm	Seats (Total: 12) KNI 2105

0501	Graham Cullen W 10:00am - 12:45pm	Seats (Total: 12) KNI 2105
0601	Sora Devore W 2:00pm - 4:45pm	Seats (Total: 12) KNI 1101
0801	Timothy Jacobsen F 9:00am - 11:45am	Seats (Total: 12) KNI 2107

JOUR382 **Sports Writing and Reporting**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JOUR320; and permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR328B or JOUR382. Formerly: JOUR328B.

Gives students full and wide-ranging instruction in all aspects of sports reporting and writing, including how to report, write, edit and lay out sports stories, incorporating photography and multimedia. We will also discuss ethics, objectivity, fairness and the future of sports journalism.

0101	Kevin Blackistone MW 10:00am - 11:15am	Seats (Total: 12) KNI 1206

JOUR396 **Supervised Internship**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Must have earned a grade of C- or better in JOUR320 or JOUR360. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR326, JOUR366, or JOUR396.

Students will complete a minimum of 90 hours in a supervised journalism internship over a minimum of 10 weeks in spring and fall, and eight weeks in summer. Emphasis is on relating academic training to professional experience. Students may pick up an internship proposal form in KNI 1100, have their internship supervisor fill it out, and meet with the college's internship director to receive permission to register. No requests to register after the Schedule Adjustment Period will be granted. This requirement would affect incoming freshmen from the fall 2012 class.

0101	Adrianne Flynn Contact instructor or department for details.	Seats (Total: 75)

JOUR398 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular

Individual projects in journalism.

Contact department for information to register for this course.

JOUR400 **Media Law**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: JOUR320, JOUR360, or JOUR501. Restriction: Junior standing or higher.

Legal rights and constraints of mass media; libel, privacy, copyright, monopoly, contempt, and other aspects of the law applied to mass communication. Previous study of the law not required.

0101	Sandra Banisky	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	KNI 1208

JOUR405 **Breaking News With Numbers: Statistics for Journalists**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR

Prerequisite: Minimum grade of C- in JOUR201; and (MATH107 or MATH110; or must have completed a higher level math course). Or have permission of the instructor. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Common statistical tools, software and data visualization techniques will be used to allow students to analyze data and solve problems relevant to reporting and writing about politics, sports, criminal justice, business and other fields.

0101	Tom Brune	Seats (Total: 38)
	Class time/details on ELMs	ONLINE

JOUR443 **Sports, Society, Culture and the Media**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Junior standing or higher. Credit only granted for: JOUR459G or JOUR443. Formerly: JOUR459G.

Designed to explore how sports, society, culture and the media critically relate to each other and the vast audiences of fans and interested parties. Students will study how journalists impact change; how sports shape culture; and how sports are seen throughout the world. College sports, children and sports, the business of sports, the history of sports media and the future of sports in society will be studied as well.

0101	George Solomon	Seats (Total: 14)
	M 12:00pm - 2:45pm	KNI 1206

JOUR451 **Advertising and Society**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Junior standing or higher.

Advertising as an institution with manifest economic purposes and latent social effects. Influences of advertising on people, and related issues of ethics and social responsibility.

0201	Kelly Stepno	Seats (Total: 15)
	M 2:00pm - 4:45pm	KNI 3202

JOUR452 **Women in the Media**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DVUP

Restriction: Junior standing or higher. Also offered as: WMST452. Credit only granted for: JOUR452 or WMST452.

Participation and portrayal of women in the mass media from colonial to contemporary times.

0101	Renee Poussaint	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	KNI 1103

JOUR453 **News Coverage of Racial Issues**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DVUP

Restriction: Junior standing or higher.

Analysis of news media coverage of issues relating to racial minorities in the United States, with special attention to Hispanics, Asian Americans, African Americans and Native Americans.

0101	Anne Rosen TuTh 9:30am - 10:45am	Seats (Total: 25) KNI 3202

JOUR455 **Media Entrepreneurship**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: JOUR459E or JOUR455. Formerly: JOUR459E.

Basic business and entrepreneurship concepts will be covered and will explore how technology is transforming the business of media. Students develop and pitch ideas for media businesses, learn startup basics, do exercises in Internet advertising and business plan analysis, use social networks and other digital communication tools, and perform other hands-on exercises in business development and presentation.

0101	Constance Ford M 3:00pm - 5:45pm	Seats (Total: 18) KNI 1206
PCJ1	Thomas Davidson Sa 1:30pm - 5:15pm *Restricted to students in the GCPS in Multimedia Journalism Program.*	Seats (Total: 15) KNI 1101

JOUR456 **Literature in Journalism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Also offered as: JOUR673. Credit only granted for: JOUR456 or JOUR673.

From Truman Capote's In Cold Blood to Mark Bowden's Black Hawk Down, students will examine how literary works can help writers approach a subject in a different way than more traditional forms of journalism, including the advantages and limitations of the style.

0101	Christopher Hanson MW 11:00am - 12:15pm	Seats (Total: 18) KNI 1103

JOUR458B **Special Topics in Journalism; Sports Media Today**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concerns and current interest.

Students will discuss working with various organizations' communications/media relations staff, coaches and players; distributing news of the organizations; and creating/maintaining methods for disseminating that news to the public in an honest and forthright manner. Also, traditional, digital and social media elements will be explored. Restriction: Junior Standing or higher.

0101	Rose DiPaula	Seats (Total: 30)
	W 9:00am - 11:45am	KNI 1208

JOUR458L **Special Topics in Journalism; Leadership: Making a Difference**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concerns and current interest.

This course introduces and analyzes the careers of leaders whose lives, words, and deeds have shaped today's world. Participants will engage in explorations of the challenges, values, and actions of individual leaders whose efforts have strengthened civil society and spirit in these times.

0101	Kevin Klose	Seats (Total: 22)
	MW 9:30am - 10:45am	KNI 1103

JOUR459B **Special Topics in Journalism; European Mass Media**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

Contact department for information to register for this course.

JOUR459F **Special Topics in Journalism; Media in War and Crisis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

Contact department for information to register for this course.

JOUR459K **Special Topics in Journalism; Global Media and International Journalism in the 21st Century**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

Contact department for information to register for this course.

JOUR459L **Special Topics in Journalism; European Mass Media**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

Contact department for information to register for this course.

JOUR459T **Special Topics in Journalism; Press Freedom and Fake News: A Global Battle for Political Power**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

This class will examine the emerging tensions and challenges of maintaining the flow of accurate, independent news to the public using four case studies: The United States, Russia and two others. We will examine the notion of "press freedom" as a basic human right, opponents of that view, and global trends in the last decade that are undermining that freedom, including the contradictory role the U.S. has played in both strengthening and weakening press freedom in emerging democracies. Then, we will explore forms of censorship, the state's and private industry's role in the shaping of the media environment and the rise of disinformation/fake news.

0101	Dana Priest M 3:00pm - 5:45pm	Seats (Total: 13) KNI 3200

JOUR472 **Computer-Assisted Reporting**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: JOUR320 or JOUR360. Also offered as: JOUR772. Credit only granted for: JOUR472 or JOUR772.

A practical, skills-based course in the basics of modern data journalism, data analysis and data storytelling. Students will learn to use data programming, statistical analysis, visualization tools and investigative reporting techniques to unearth key facts, patterns and proof in storytelling.

Prerequisite: JOUR320 or JOUR360. Computer and online data acquisition; analytical methods for writing and reporting news. Students must contact Assistant Dean Josh Madden for permission to register.

0101	Sean Mussenden TuTh 12:00pm - 1:50pm	Seats (Total: 3) KNI 2103

JOUR476 **Researching Emerging Media in Journalism: Past, Present and Future**

(Perm req) Credits: 3 Grading Method: Regular, Audit General Education: DSHS

Prerequisite: Must have completed a university statistics course. Credit only granted for: JOUR479W or JOUR476. Formerly: JOUR479W.

Students will examine developments billed as innovative in the current technology-laden news ecology -- such as social media, mobile reporting and virtual reality -- and the blurring of lines between hard news, informed opinion and advocacy. While questions about the future cannot be answered with any certainty, an exploration of the past allows us to see what happened when new technologies, information systems and practices appeared as possible tools for use by journalists and the communities they served. Students will learn to use resources for researching emerging media, including UMD library databases and open access sources. The course will include presentations by the instructor, discussions, field trips, in-class exercises and student presentations. Each student will engage in a research project to understand the experience of emerging media in a decade between 1820 and 1980. Students will also write an essay contemplating current trends and the future of emerging media.

0101	Ira Chinoy	Seats (Total: 18)
	MW 9:30am - 10:45am	KNI 1101

JOUR479D **Special Topics in Data Gathering and Analysis; Using Investigative Tools in Reporting**

(Perm req) Credits: 3 Grading Method: Regular

Special research topics for reporting and writing.

Students will be introduced to the journalists and techniques behind award-winning investigations. In-class meetings will dissect these stories, often with the reporters who did them. Reporters will share the methods behind their success and you'll experiment with them. Students will work on reporting stories through online tools, human sources, records, data and observation. Students will learn techniques that apply to all forms of journalism and all beats, whether broadcast or multi-platform, public affairs or sports.

0101	Deborah Nelson	Seats (Total: 20)
	M 12:00pm - 1:15pm Class time/details on ELMs	KNI 3200 ONLINE

JOUR479I **Special Topics in Data Gathering and Analysis; Seeing - Media, Images and Design**

(Perm req) Credits: 3 Grading Method: Regular

Special research topics for reporting and writing.

Prerequisite: A university statistics course. Students will be introduced to the expanding ways the "visual" is embedded in all we do and all that we are. Students will tackle challenges of why "seeing" matters and in so doing will learn visual theory. Media have become less about words and more about sight: Students will consider the ethics and impact of images on people and politics and turn those lessons into an examination of the methods of research projects where images are the data. What do we see? What don't we see? Students will analyze and deconstruct images created by others and use those insights to inform their own creation of a culminating visual journalism research project.

0101	Susan Moeller	Seats (Total: 18)
	TuTh 11:00am - 12:15pm	KNI 2105

JOUR479O **Special Topics in Data Gathering and Analysis; Understanding Audiences**

(Perm req)

Credits: 3 Grading Method: Regular

Special research topics for reporting and writing.

Prerequisite: Must have completed a university statistics course. As journalism evolves, it may be more important than ever to understand what were once simply called "audiences"- who they are, how they consume news, and what that engagement means for them and for society. Students will learn to think critically about news audiences and contemporary issues in audience research.

0101	Ronald Yaros	Seats (Total: 18)
	TuTh 2:00pm - 3:15pm	KNI 2105

JOUR479T **Special Topics in Data Gathering and Analysis; Community-Engaged Research and Service**

(Perm req)

Credits: 3 Grading Method: Regular

Special research topics for reporting and writing.

In this course, students will research, develop and present journalism- related workshops in diverse community forums as part of an effort to foster trust and understanding between the press and the public. Students will establish relationships with community partners, conduct research using methods such as surveys, focus groups and interviews to identify issues of concern relating to the media, and find and analyze academic literature that addresses those issues. Finally, students will produce and present an interactive program that uses Participatory Action Research (PAR) to engage participants on collaborative solutions. (Course supported by The School of Public Policy's Do Good Institute).

0101	Mary Burns	Seats (Total: 10)
	MW 10:00am - 11:15am	KNI 1109

JOUR480 **Capstone Colloquium: The Business of News**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism; and junior standing or higher; and permission of JOUR-Philip Merrill College of Journalism.

Students will learn the basic news business concepts and examine how revenue and cost structures for media businesses are evolving in new directions. Topics include basic principles and concepts that drive media businesses in the Internet age, including revenue sources, dynamics of online advertising and subscriptions, mobile media strategies, user metrics, engaging audiences, and market dynamics.

0101	Leslie Walker	Seats (Total: 60)
	Meets January 28, 2019 - March 14, 2019	
	M 6:00pm - 7:40pm	KNI 1208

JOUR603 **News Videography**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: JOUR504; and permission of Journalism College required. Restriction: Permission of JOUR-Philip Merrill College of Journalism. Also offered as: JOUR262. Credit only granted for: JOUR503 or JOUR603. Formerly: JOUR503.

Introduction to shooting, editing and production of video stories for broadcast and the Web; includes newsgathering in the field.

0101	Bethany Swain	Seats (Total: 8)
	MW 12:00pm - 1:50pm	TWS 0222B
0201	Benjamin Worsley	Seats (Total: 1)
	TuTh 7:00pm - 8:50pm	TWS 0222A

JOUR620 **Public Affairs Reporting**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: JOUR501; or permission of JOUR-Philip Merrill College of Journalism.

Designed to add to and sharpen the skills learned in JOUR501. It is primarily an introduction to "beat" reporting that allows students to sample the most common new beats while reporting and writing on deadline. Students are required to develop and hone their multimedia skills by reporting in a variety of media.

0101	Christine Harvey TuTh 9:30am - 11:20am	Seats (Total: 11) KNI 2103
0201	Adrianne Flynn TuTh 9:30am - 11:20am	Seats (Total: 10) KNI 2107

JOUR623 **Mobile Journalism**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Students must have basic computer skills. Credit only granted for: JOUR689M or JOUR623. Formerly: JOUR689M.

A review of several mobile applications and the "hands-on" skills needed to collect and share news in the field. First, students learn how to remotely post information to blogs and social networks. Students then learn and practice the latest location-based production techniques using web services on wireless laptops and mobile devices. Students use laptops (and their own "SmartPhone") to record, edit and upload audio and video.

PCJ1	Ronald Yaros Sa 8:30am - 12:15pm *Restricted to students in the GCPS in Multimedia Journalism Program.*	Seats (Total: 15) KNI 3202

JOUR625 **Advanced Capital News Service Bureau**

(Perm req)

Credits: 6 Grading Method: Regular, Audit

Prerequisite: JOUR620; and permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR625 or JOUR729. Formerly: JOUR729.

Advanced journalism training. Students report as part of College's Capital News Service program.

Washington, D.C. Bureau students register for section 0101. Annapolis Bureau students register for section 0201.

0101	James Carroll Contact instructor or department for details.	Seats (Total: 10)
0201	Karen Denny Contact instructor or department for details.	Seats (Total: 10)

JOUR628B **Specialized Topics in News Writing and Reporting; Sports Reporting and Writing**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Advanced training and practice in writing and reporting news. Repeatabl to a maximum of six credits provided the content differs.

Prerequisite: JOUR620. This course will give students full and wide-ranging instruction in all aspects of sports reporting and writing, from the history of the craft to its mechanics, including how to prepare to report and write sports stories, incorporating photography, audio, video and interactive mechanics and the laying out and editing of them. We will also discuss ethics, objectivity, fairness and the future of sports journalism.

0101	Kevin Blackistone	Seats (Total: 6)
	MW 10:00am - 11:15am	KNI 1206

JOUR628N **Specialized Topics in News Writing and Reporting; National Security Reporting**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Advanced training and practice in writing and reporting news. Repeatabl to a maximum of six credits provided the content differs.

Prerequisite: JOUR620. Students will conduct in-depth, investigative reporting on a national security-related issue that will teach them to deepen their source-cultivation and rapport-building and their understanding of national security issues. As part of the course, they will also look at how Washington works and the importance of public affairs reporting in the democratic policy making process.

0101	Dana Priest	Seats (Total: 5)
	M 9:00am - 11:45am	KNI 3200

JOUR628R **Specialized Topics in News Writing and Reporting; Business Reporting**

(Perm req)

Credits: 3

Grading Method: Regular

Advanced training and practice in writing and reporting news. Repeatabl to a maximum of six credits provided the content differs.

Prerequisite: JOUR620. This course will introduce students to the major themes in business and economic reporting and explain why this area of journalism continues to grow. Students will learn to understand the needs of business readers, identify newsworthy stories and interpret and integrate numbers and financial data into stories in a compelling way.

0101	Constance Ford	Seats (Total: 2)
	W 10:00am - 12:45pm	KNI 2107

JOUR652 **Interactive Design and Development**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Corequisite: Offered to students enrolled in the journalism master's degree or certificate. Master's degree students should take JOUR 504 as a pre- or co-requisite. Certificate students are encouraged to take JOUR 604 as a co-requisite. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR652 or JOUR352.

Conceptualize, wireframe, design and build responsive Web pages using HTML, style sheets and other coding tools; work with open source interactive tools and JavaScript libraries to create charts, timelines and maps to tell stories.

0101	Adam Marton M 10:00am - 12:45pm	Seats (Total: 3) KNI 2107

JOUR654 **Advanced Interactive Multimedia Storytelling**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: JOUR652; and permission of JOUR-Philip Merrill College of Journalism.

Learning and applying Flash and/or other interactive tools to assemble multiple media (i.e. graphics, video, etc.) to create interactive narratives.

0101	Ljiljana Ciric Hoffmann Tu 4:00pm - 6:45pm	Seats (Total: 5) TWS 0222B

JOUR655 **Advanced Online News Bureau**

(Perm req)

Credits: 6

Grading Method: Regular, Audit

Prerequisite: JOUR603 or JOUR620; and (JOUR504 and JOUR652). Or permission of JOUR-Philip Merrill College of Journalism.

Advanced online journalism training. Students work as online reporters, editors and producers for a news site. Students also package copy from the print and broadcast news bureaus.

0101	Adam Marton, Sean Mussenden Contact instructor or department for details.	Seats (Total: 4)
0201	Brooke Auxier Contact instructor or department for details.	Seats (Total: 4)

JOUR660 **Broadcast News Writing**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: JOUR501. Credit only granted for: JOUR660 or JOUR760. Formerly: JOUR760.

Descriptive and critical analysis of broadcast news; methods of evaluation of news judgments; decision-making and organizational aspects of the broadcast news industry.

0101	Mary Burns, Susan Katcef, Cassandra Clayton	Seats (Total: 8)
	TuTh 2:00pm - 3:15pm	KNI 2107

JOUR664 **Radio Broadcasting**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: JOUR501 and JOUR603; or permission of JOUR-Philip Merrill College of Journalism. Restriction: Permission of JOUR-Philip Merrill College of Journalism.

Students apply news reporting skills to prepare and produce a weekly radio news magazine program.

0101	Robert Little	Seats (Total: 2)
	W 5:30pm - 8:15pm	TWS 0222A

JOUR667 **Broadcast News Bureau**

(Perm req)

Credits: 6

Grading Method: Regular, Audit

Prerequisite: JOUR503; or students who have taken courses with comparable content may contact the department. And permission of JOUR-Philip Merrill College of Journalism.

Advanced broadcast journalism training. Students report as part of the College's Capital News Service program.

0101	Susan Katcef	Seats (Total: 6)
	Contact instructor or department for details.	

JOUR668K **Topics in Broadcasting and Electronic Media; Video Innovation**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Advance research and analysis of selected topics in broadcast journalism.

Prerequisite: JOUR661 and permission of the instructor (jdavidsb@umd.edu). Students will explore the intersection between social media, video and a live broadcast by creating new and innovative ways to "broadcast" news to an audience. The class will encourage an entrepreneurial spirit and give students the opportunity to produce a show from scratch, with content aired on UMTV and online. In addition to creating television, students will support the broadcast arm of Capital News Service by managing volunteers, filling in on the studio staff and producing special projects and graphics when necessary.

0101	Joshua Davidsburg	Seats (Total: 1)
	Tu 12:00pm - 2:45pm	TWS 0222B

JOUR668V **Topics in Broadcasting and Electronic Media; Advanced Video Storytelling**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Advance research and analysis of selected topics in broadcast journalism.

Prerequisite: JOUR661 and permission of instructor. Students will learn advanced storytelling, shooting and editing techniques for multi-platform video, using character-driven, natural sound packages to produce in-depth projects on a common theme.

0101	Bethany Swain	Seats (Total: 1)
	M 2:45pm - 5:45pm	TWS 0222B

JOUR698 **Special Problems in Communication**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Independent study in area of the student's interest.

Contact department for information to register for this course.

JOUR698I **Special Problems in Communication; Advanced Public Affairs Reporting/Investigative Journalism**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Independent study in area of the student's interest.

Prerequisites: JOUR501. Students will learn the essentials of accountability reporting while producing a publishable, in-depth project on an issue with national significance and impact on people's lives. Substantial fieldwork, teamwork and persistence are required.

0101	Deborah Nelson	Seats (Total: 9)
	Contact instructor or department for details.	

JOUR772 **Methods in Computer-Assisted Reporting**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in JOUR501; or students who have taken courses with comparable content may contact the department. Credit only granted for: JOUR472 or JOUR772.

A practical, skills-based course in the basics of modern data journalism, data analysis and data storytelling. Students will learn to use data programming, statistical analysis, visualization tools and investigative reporting techniques to unearth key facts, patterns and proof in storytelling.

Students must contact Associate Dean Rafael Lorente (rlorente@umd.edu) for permission to register.

0101	Sean Mussenden TuTh 12:00pm - 1:50pm	Seats (Total: 15) KNI 2103

JOUR775 **Quantitative Methods in Journalism and Public Communication Research**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: JOUR701 or JOUR775. Formerly: JOUR701.

Logic and methods of quantitative data collection and statistical analysis as applied to journalism and public communication studies.

0101	Ronald Yaros Th 11:00am - 1:45pm	Seats (Total: 8) KNI 3207

JOUR776 **Qualitative Research Methods in Journalism and Public Communication**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: JOUR711 or JOUR776. Formerly: JOUR711.

Methods of historical, critical and field research in journalism and public communication. Formulation of significant research questions, systematic collection of bibliographic and phenomenal information, formulating substanial claims, organizing and writing research for disciplinary outlets.

0101	Linda Steiner W 9:00am - 11:45am	Seats (Total: 8) KNI 2109

JOUR798 **Master's Professional Fieldwork**

(Perm req)

Credits: 2-6 Grading Method: Sat-Fail

Research for and preparation of news articles or programs for use in th media. Analysis of fieldwork experience using communication theory and research results. Fieldwork may be done independently or as an internship. Repeatable to a maximum of six credits.

Contact department for information to register for this course.

JOUR799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

JOUR801 **Advanced Public Communication Theory**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: JOUR601; or students who have taken courses with comparable content may contact the department. Credit only granted for: JOUR601 or JOUR801.

Advanced selected survey of communication & media theory.

0101	Krishnan Vasudevan	Seats (Total: 12)
	F 10:00am - 12:45pm	KNI 1109

JOUR888 **Doctoral Professional Field Work**

Credits: 3-9 Grading Method: Regular, Audit

Critical analysis of a phase of a professional field in journalism and public communication. Analysis of professional activity through personal observation. Evaluation of the purpose, process, effectiveness, and efficiency of professional activity. Recommendations for training and further research.

Contact department for information to register for this course.

JOUR889 **Doctoral Tutorial in Journalism and Public Communication**

Credits: 3-9 Grading Method: Regular, Audit

Individual research in journalism and public communication.

Contact department for information to register for this course.

JOUR898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

JOUR899 **Doctoral Dissertation Research in Journalism and Mass Communication**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

JWST Jewish Studies Spring 2019

JWST219B **Special Topics in Jewish Studies; Gender and Sexuality in Israeli Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVUP

Also offered as ISRL249K, FILM298K, WMST298T, and LGBT298T. Credit only granted for ISRL249K, JWST219B, FILM298K, WMST298T, or LGBT298T. This course will explore the different ways gender and sexuality have been represented in Israeli Cinema over time. We will examine notions of "manhood" and "womanhood" within the Israeli social context, as well as look at examples of outliers, exceptions, transgressors, and pariahs. We will investigate different types of representations of gender and sexuality, asking how they configure secular society, the Orthodox/ Haredi religious community, the LGBTQ community, the Arab/Palestinian communities, the Israeli soldier population, and more.

0101	Shalom Rosenberg	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	TWS 1321

JWST219C **Special Topics in Jewish Studies; Contemporary Israel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

JWST219D **Special Topics in Jewish Studies; Women in Israel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

JWST219E **Special Topics in Jewish Studies; Writing Israel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

JWST262 **Introduction to the Hebrew Bible/Old Testament**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Also offered as: ENGL262. Credit only granted for: JWST262, HEBR223 or ENGL262. Formerly: HEBR223.

Origins of the Hebrew Bible (Old Testament), with attention to literary formations, archaeology, and social-political settings. Explorations of major questions, including who wrote the Bible, and when; relationships of the biblical tradition to the mythology and religious structures of ancient Israel's near eastern neighbors; and dynamics of politics, religious leadership, and law.

0101	Maxine Grossman MW 2:00pm - 3:15pm	Seats (Total: 40) SQH 1101

JWST272 **Introduction to Jewish Literature**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL	General Education: DSHU, DVUP

Also offered as: CMLT242. Credit only granted for: CMLT242 or JWST272.

A survey of Jewish literature and introduction to methods of reading literature in general and Jewish literature in particular. Concern with what makes a literary corpus Jewish and other issues of canonicity. All texts in English translation.

Also offered as ISRL249G and CMLT242. Credit only granted for CMLT242, ISRL249G, or JWST272.

0101	Adi Mahalel TuTh 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 40) TYD 1108 ONLINE

JWST275 **The Jew and the City through the Centuries**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SH, D	General Education: DSHS, DVUP

Also offered as: HIST286. Credit only granted for: HIST286 or JWST275.

Jewish urban experience from ancient times to the present. Public space and private. The city and the sacred. Jewish ghettos and quarters. The struggle over modern Jerusalem.

Also offered as HIST286. Credit only granted for HIST286 or JWST275.

0101	Bernard Cooperman MW 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 40) KEY 0116 ONLINE

JWST282 **Elementary Yiddish II**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: JWST281; or permission of ARHU-Meyerhoff Program & Center for Jewish Studies.

Continuation of JWST281.

JWST281 or GERM148Y or permission of department. Also offered as GERM149Z. Not open to students who have completed GERM149Z. Continuation of JWST281.

0101	Adi Mahalel	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	JMZ 1205
	Class time/details on ELMs	ONLINE

JWST289A **New Explorations in Jewish Studies; Can Jews be Arabs? Identity and Crisis for the Jews of Arab Lands in Modern Times**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHS, DVUP

Investigation of critical and innovative responses in Jewish Studies. Although the topic will vary, the course will encourage intellectual exploration by students of fundamental problems and critical methods.

Also offered as HIST219C. Credit only granted for JWST289A or HIST219C. Examines the complex and fraught history of the Jews of Arab lands in modern times, with a focus on questions of identity, relationship with Christian and Muslim Arabs, and the impact of Zionism and Arab nationalism.

0101	Shay Hazkani	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	HJP 2114

JWST319B **Special Topics in Jewish Studies; Arab-Israeli Relations**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics in Jewish Studies.

Contact department for information to register for this course.

JWST319E **Special Topics in Jewish Studies; Literature of the Shoah**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics in Jewish Studies.

Contact department for information to register for this course.

JWST319M **Special Topics in Jewish Studies; Beyond Black and White: Jews and Representations of Race**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Topics in Jewish Studies.

Also offered as ISRL349Z. Credit only granted for ISRL349Z or JWST319M. An examination of Western constructions and representations of 'race' from medieval times to the modern rise of Zionism and the founding of Israel, with a focus on how Jews utilized the racial discourses of each period to negotiate their position within Western history.

0101	Shirelle Doughty Class time/details on ELMs	Seats (Total: 40) ONLINE
0102	Shirelle Doughty Class time/details on ELMs	Seats (Total: 30) ONLINE

JWST319V **Special Topics in Jewish Studies; Religious and Political Transformations in Modern Jewish History, 1650 - 1870**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Topics in Jewish Studies.

Also offered as HIST329F. Credit granted for JWST319V or HIST329F. Analysis of the social, cultural, and political forces that led to the emancipation of the Jews and the integration of a once detested ethnic- religious group into European society. Attention will be paid to new Jewish religious movements, including Reform Judaism and Neo-Orthodoxy, as well as to the profound changes in Jewish life-style in the nineteenth century.

0101	Marsha Rozenblit TuTh 12:30pm - 1:45pm	Seats (Total: 30) KEY 0100

JWST324 **Biblical History and Culture**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Also offered as: HIST321. Credit only granted for: HEBR333, HIST321, or JWST324. Formerly: HEBR333.

Study of the political, social, and religious development of the Jewish nation from its inception to its return from exile in Babylonia around 536 C.E. Focus on biblical texts, archeological finds, and source materials from neighboring cultures to reconstruct political history and the development of religious concepts.

0101	Matthew Suriano	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	SQH 1103

JWST331 **Early Christianity: Jesus to Constantine**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed one course in ancient history at the 200 level. Also offered as: HIST320. Credit only granted for: HIST320 or JWST331.

Social and religious history of early Christianity from its origin in the first century to the reign of Constantine.

Also offered as HIST320. Credit granted for JWST331 or HIST320.

0101	Elizabeth Conner	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	KEY 0103

JWST345 **The Holocaust of European Jewry**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as: HIST307. Credit only granted for: HIST307 or JWST345.

Roots of Nazi Jewish policy in the 1930s and during World War II: the process of destruction and the implementation of the "final solution of the Jewish problem" in Europe, and the responses made by the Jews to their concentration and annihilation.

0101	Marsha Rozenblit	Seats (Total: 47)
	TuTh 3:30pm - 4:45pm	TYD 2106

JWST369J **Special Topics in Study Abroad III; Contemprary Jewish Thought**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

JWST369R **Special Topics in Study Abroad III; Italy and the Jews: History and Culture from the Renaissance to the Present**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

JWST386 **Experiential Learning in Jewish Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARHU-Meyerhoff Program & Center for Jewish Studies. Restriction: Junior standing or higher.

The Jewish Studies Program's internship program. Pre-professional experience in research, analysis, and writing related to Jewish Studies in a variety of work settings.

Students will meet with instructor for one hour per week while completing their internship.

0101	Instructor: TBA	Seats (Total: 15)
	Contact instructor or department for details.	
	Meeting time is subject to change to accommodate student course and internship schedules.	

JWST409C **Research Seminar in Jewish Studies; The Construction of Jewish Knowledge**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

A capstone course for Jewish Studies. Guides students through advanced source material and subject matter, research skills, and presentation techniques. A substantive paper based on independent research and analysis is one expected outcome.

0101	Bernard Cooperman	Seats (Total: 6)
	M 2:00pm - 3:50pm	TLF 2100
	Contact instructor or department for details.	

JWST409F **Research Seminar in Jewish Studies; Death in the Biblical World**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

A capstone course for Jewish Studies. Guides students through advanced source material and subject matter, research skills, and presentation techniques. A substantive paper based on independent research and analysis is one expected outcome.

Death, burial and concepts of the afterlife in the ancient Mediterranean cultures with a particular focus on ancient Israel and early Judiasm. Source material, both texts and artifacts, will be examined within the contexts of the ancient Near East (Egypt and Mesopotamia) and the Classical World (Greece and Rome). Also offered as ARTH489J. Credit granted for JWST409F or ARTH489J.

0101	Matthew Suriano	Seats (Total: 10)
	Tu 4:00pm - 6:00pm Contact instructor or department for details.	SQH 1123

JWST418 **Honors Thesis Research in Jewish Studies**

(Perm req)

Credits: 3 Grading Method: Regular

Guided research on a thesis under the supervision of the Jewish Studies faculty.

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 1)

JWST419C **Special Topics in Jewish Studies; Representing the Holocaust**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as FILM469E. Credit granted for JWST419C or FILM469E.

0101	Eric Zakim	Seats (Total: 30)
	MW 2:00pm - 3:15pm	KNI 1103

JWST419Z **Special Topics in Jewish Studies; Targumic Aramaic**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This is a Big Ten Academic Alliance Course-Share course. The instructor, Tawny Holm, is at the Penn State University. UMD students enroll and and attend the class at UMD. For more information, contact the instructor at tholm@psu.edu or (814) 863-0790. A general introduction to Aramaic and will enable students to read texts in a variety of Aramaic dialects. No prior knowledge of Aramaic or any other Semitic language is required.

0101	Instructor: TBA **Meets January 8, 2019 - April 25, 2019** TuTh 3:05pm - 4:20pm	Seats (Total: 20) JMZ 1205

JWST429M **Advanced Topics in Jewish Studies; American Jewry and Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics at an advanced level for Jewish Studies. Primarily intended for majors and graduate students.

Also offered as GVPT368N. Credit only granted for JWST429M or GVPT368N. An examination of the contours of American Jewry and its engagement in public policy. Focus will be on historical development, Jewish political thought, organizational and representation structures. Areas of specific concern include Israel and foreign policy, as well as domestic topics, including electoral politics. A number of in-depth case studies will be examined.

0101	Scott Lasensky	Seats (Total: 40)
	Tu 4:00pm - 6:30pm	HJP 2114

JWST469P **Readings in Rabbinic Hebrew; Development of Prayers and Liturgy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Readings in classical rabbinic texts and related corpora. Emphasis on grammar and reading skills as well as critical analysis of the material. Language of instruction: English; all texts in original language.

0101	Hayim Lapin	Seats (Total: 15)
	W 4:00pm - 6:30pm	SQH 1111

JWST499 **Independent Study in Jewish Studies; Independent Study in Jewish Studies**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: permission of department.

Contact department for information to register for this course.

JWST619 **Directed Readings in Jewish Studies**

(Perm req)

Credits: 3 Grading Method: Regular

Independent Study in Jewish Studies. Readings and papers.

Contact department for information to register for this course.

JWST648 **Readings in Jewish History; Readings in Jewish History**

(Perm req)

Credits: 3 Grading Method: Regular

Focus on the central issues in Jewish history as well as the key historiographical debates on those issues.

Prerequisite: permission of department. Repeatable to 9 credits if content differs. Focus on the central issues in Jewish history as well as the key historiographical debates on those issues.

Contact department for information to register for this course.

JWST658 **Readings in Jewish Thought and Culture**

(Perm req)

Credits: 3 Grading Method: Regular

Examines key issues in the development of Jewish thought and culture.

Prerequisite: permission of department. Repeatable to 9 credits if content differs. Examines key issues in the development of Jewish thought and culture.

Contact department for information to register for this course.

JWST678 **Readings in Jewish Literature**

(Perm req)

Credits: 3 Grading Method: Regular

Examines selected themes or literatures in the development of Jewish literary traditions.

Prerequisite: permission of department. Repeatable to 9 credits if content differs. Examines selected themes on literatures in the development of Jewish literary traditions.

Contact department for information to register for this course.

JWST699 **Independent Graduate Readings in Jewish Studies**

(Perm req)

Credits: 3 Grading Method: Regular

Independent readings or guided research in a field of Jewish Studies with a member of the Jewish Studies graduate faculty.

Contact department for information to register for this course.

JWST719P **Readings in Jewish Studies; Readings in Rabbinic Hebrew: Development of Prayers and Liturgy**

Credits: 3 Grading Method: Regular, Audit

Course exposes students to significant primary and secondary material o selected topics as well as the major methodological problems covered by professional scholars working on these topics.

0101	Hayim Lapin	Seats (Total: 4)
	W 4:00pm - 6:30pm	SQH 1111

JWST799 **Masters Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Research and Writing the Masters Thesis in Jewish Studies.

Prerequisite: permission of department.

Contact department for information to register for this course.

KNES Kinesiology Spring 2019

KNES100O **Physical Education Activities: Coed; Basketball (Intermediate)**

Credits: 2 Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class.Students must pay a $40.00 instructional materials fee.

0001	Andrew Ginsberg MW 10:00am - 12:00pm	Seats (Total: 40) ERC 0135	Lab
0002	Andrew Ginsberg MW 12:00pm - 2:00pm	Seats (Total: 40) ERC 0135	Lab
0003	Timothy Henkel TuTh 12:00pm - 2:00pm	Seats (Total: 40) ERC 0135	Lab

KNES131O **Physical Education Activities: Coed; Jogging (Intermediate)**

Credits: 2 Grading Method: Regular, Pass-Fail

Prerequisite: KNES 131V or 10k experience. For majors only. One weekend event expected.
Attendence is required the first day of class. Students must pay a $40.00 instructional materials fee.

0001	Timothy Henkel TuTh 2:00pm - 4:00pm	Seats (Total: 40) ARM 1122	Lab

KNES131V **Physical Education Activities: Coed; Jogging (Beginning)**

Credits: 2 Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class. Students must pay a $40.00 instructional materials fee.

0002	Anna Posbergh MW 2:00pm - 4:00pm	Seats (Total: 40) ARM 1122	Lab

KNES131Z **Physical Education Activities: Coed; Beginning Softball**

Credits: 1 Grading Method: Regular, Pass-Fail

Attendance is required of all students the first day in Ritchie Arena (1100), thereafter the class will meet on the ENGR Fields. Schedule adjustment is the first week of class only. Students must pay a $40.00 instructional materials fee.

0001	Andrew Ginsberg, Jo Zimmerman	Seats (Total: 25)	
	Meets March 25, 2019 - May 14, 2019		
	TuTh 1:00pm - 3:00pm	Location: TBA	Lab

KNES132N Physical Education Activities: Coed; Badminton (Beginning)

Credits: 1 Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class. Schedule adjustment is the first week of class only. Students must pay a $40.00 instructional materials fee.

0002	Wontak Kim	Seats (Total: 24)	
	Meets January 28, 2019 - March 15, 2019		
	MW 2:00pm - 4:00pm	SPH 2101	Lab

KNES134O Physical Education Activities: Coed; Bowling (Intermediate)

Credits: 1 Grading Method: Regular, Pass-Fail

Attendance is required the first day of class. Studentsmust pay a $40.00 instructional materials fee; plus bowling shoes arerequired. Schedule adjustment is the first week of class only.

0001	Timothy Henkel	Seats (Total: 30)	
	Meets January 28, 2019 - March 15, 2019		
	TuTh 8:00am - 10:00am	SSU B0106C	Lab
0002	Timothy Henkel	Seats (Total: 30)	
	Meets March 25, 2019 - May 14, 2019		
	TuTh 8:00am - 10:00am	SSU B0106C	Lab

KNES140O Physical Education Activities: Coed; Tumbling and Balancing (Intermediate)

Credits: 1 Grading Method: Regular

Attendance is required on the first day of class. Schedule Adjustment is the first week of class only. Students must pay a $40.00 instructional materials fee.

0001	Joshua Montfort	Seats (Total: 25)	
	Meets March 25, 2019 - May 14, 2019		
	TuTh 10:00am - 12:00pm	SPH 1120	Lab

KNES140R **Physical Education Activities: Coed; Trampoline (Beginning)**

Credits: 1

Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class. Scheduled adjustment is the first week of classes only. Students must pay a $40.00 instructional materials fee.

0001	Dylan Taylor	Seats (Total: 25)	
	Meets January 28, 2019 - March 15, 2019		
	MW 10:00am - 12:00pm	SPH 1120	Lab

KNES140V **Physical Education Activities: Coed; Tumbling and Balancing (Beginning)**

Credits: 1

Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class. Schedule Adjustment is the first week of class only. Students must pay a $40.00 instructional materials fee.

0001	Joshua Montfort	Seats (Total: 25)	
	Meets January 28, 2019 - March 15, 2019		
	TuTh 10:00am - 12:00pm	SPH 1120	Lab

KNES144Q **Physical Education Activities: Coed; Martial Arts, Karate (Beginning)**

Credits: 2

Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class. Students must pay a $40.00 instructional materials fee.

0001	Kenneth Klotz	Seats (Total: 35)	
	MW 10:00am - 12:00pm	SPH 0107	Lab

KNES144T **Physical Education Activities: Coed; Self-Defense**

Credits: 2

Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class. Students must pay a $40.00 instructional materials fee.

0001	Kenneth Klotz	Seats (Total: 35)	
	MW 8:00am - 10:00am	SPH 0107	Lab

KNES152O **Physical Education Activities: Coed; Soccer (Intermediate)**

Credits: 1 Grading Method: Regular, Pass-Fail

Restriction: Must be in a major within SPHL-Kinesiology department. Schedule adjustment is the first week of class only. Attendance is required on the first day of class. Students must pay a $40.00 instructional materials fee.

0001	Jessica Nahmias	Seats (Total: 24)	
	Meets January 28, 2019 - March 11, 2019		
	MW 10:00am - 12:00pm	ARM 1122	Lab
0002	Jessica Nahmias	Seats (Total: 24)	
	Meets March 25, 2019 - May 14, 2019		
	MW 10:00am - 12:00pm	ARM 1122	Lab

KNES154N **Physical Education Activities: Coed; Swimming (Beginning)**

Credits: 1 Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class. Students must pay a $40.00 instructional materials fee.

0001	Natalie Taylor	Seats (Total: 22)	
	TuTh 8:00am - 9:15am	ERC B0120	Lab

KNES154O **Physical Education Activities: Coed; Swimming (Intermediate)**

Credits: 1 Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class. Students must pay a $40.00 instructional materials fee.

0001	Stephanie Draminski	Seats (Total: 22)	
	MW 1:00pm - 2:15pm	ERC B0120	Lab

KNES154T **Physical Education Activities: Coed; Swimming, Fitness (Intermediate)**

Credits: 1 Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class. Students must pay a $40.00 instructional materials fee.

0001	Brent Flynn	Seats (Total: 22)	
	TuTh 9:30am - 10:45am	ERC B0120	Lab

KNES154W **Physical Education Activities: Coed; Swimming/Lifeguard Training**

Credits: 2 Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class. Students must pay a $40.00 instructional materials fee.

0001	Ronald Willoughby, Mary Mires	Seats (Total: 20)	
	MW 9:00am - 11:00am	ERC B0120	Lab

KNES157N **Physical Education Activities: Coed; Weight Training (Beginning)**

Credits: 1 Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class. Students must pay a $40.00 instructional materials fee.

0001	Brandon Lee	Seats (Total: 32)	
	MW 1:00pm - 2:15pm	SPH 0103	Lab
0002	Timothy Henkel	Seats (Total: 32)	
	MW 11:00am - 12:15pm	SPH 0103	Lab
0003	Anna Posbergh	Seats (Total: 32)	
	TuTh 2:00pm - 3:15pm	SPH 0103	Lab

KNES157O **Physical Education Activities: Coed; Weight Training (Intermediate)**

Credits: 1 Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class. Students must pay a $40.00 instructional materials fee.

0001	Tori Thompson	Seats (Total: 32)	
	MW 12:00pm - 1:15pm	SPH 0103	Lab
0002	Laura Rush	Seats (Total: 32)	
	TuTh 12:00pm - 1:15pm	SPH 0103	Lab

0004	Brandon Lee	Seats (Total: 32)	
	MW 2:00pm - 3:15pm	SPH 0103	Lab
0005	Daylin Russo	Seats (Total: 32)	
	TuTh 11:00am - 12:15pm	SPH 0103	Lab

KNES157T **Physical Education Activities: Coed; Fight the 15: Introduction to Fitness and an Active Lifestyle**

Credits: 1 Grading Method: Regular, Pass-Fail

For non-majors only. Students must pay a $40.00 instructional materials fee. Intended for students interested in learning basic aspects of exercise and fitness. Coverage of fitness fundamentals, training concepts and techniques, and facilities available on and off campus to aid in an active lifestyle.

0001	Jennifer Lee	Seats (Total: 30)	
	MW 10:00am - 11:15am	SPH 2101	Lab

KNES161G **Physical Education Activities: Coed; Yoga for Fitness (Intermediate)**

Credits: 1 Grading Method: Regular, Pass-Fail

Restriction: Must be in a major within SPHL-Kinesiology department. Attendance is required beginning the first day of class. Students must pay a $40.00 instructional materials fee.

0001	Laura Rush	Seats (Total: 30)	
	TuTh 3:00pm - 4:15pm	SPH 0107	Lab

KNES161K **Physical Education Activities: Coed; Cardio Kickboxing (Beginning)**

Credits: 2 Grading Method: Regular, Pass-Fail

Attendance is required beginning the first day of class Students must pay a $40.00 instructional materials fee.

0001	Laura Rush	Seats (Total: 50)	
	TuTh 1:00pm - 3:00pm	ERC 0105	Lab
	Restriction: Must be in a major within SPHL-Kinesiology department. Attendance is required beginning the first day of class.		

KNES161N **Physical Education Activities: Coed; Conditioning (Beginning)**

Credits: 1

Grading Method: Regular, Pass-Fail

Schedule Adjustment is the first week of classes only. Attendance is required on the first day of class. Students must pay a $40.00 instructional materials fee.

0001	Steven Kahl	Seats (Total: 30)	
	TuTh 12:00pm - 1:15pm	SPH 2101	Lab

KNES161O **Physical Education Activities: Coed; Conditioning (Intermediate)**

Credits: 1

Grading Method: Regular, Pass-Fail

Attendance is required on the first day of class. Schedule adjustment is the first week of class only. Students must pay a $40.00 instructional materials fee.

0001	Wontak Kim	Seats (Total: 32)	
	Meets March 25, 2019 - May 14, 2019		
	MW 2:00pm - 4:00pm	SPH 2101	Lab

KNES161T **Physical Education Activities: Coed; Yoga**

Credits: 1

Grading Method: Regular, Pass-Fail

Attendance on the first day of class is mandatory. Students must pay a $40.00 instructional materials fee.

0001	Patrick McCleaf	Seats (Total: 30)	
	Meets January 28, 2019 - March 15, 2019		
	TuTh 10:00am - 12:00pm	SPH 0107	Lab
0002	Patrick McCleaf	Seats (Total: 30)	
	Meets March 25, 2019 - May 14, 2019		
	TuTh 10:00am - 12:00pm	SPH 0107	Lab

KNES201 **Kinesiological Principles of Physical Activity**

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Corequisite: Any physical activity course, e.g., KNES 100-190; or permission of SPHL-Kinesiology department. Restriction: Must be in a major in SPHL-School of Public Health. Credit only granted for: KNES200 or KNES201.

An introduction to Kinesiology, the study of human movement, through the experience of learning a specific motor skill or being engaged in physical activity. Emphasis on the theories and knowledge underlying the learning and performance of all motor and sport skills.

0101	Tori Thompson **Meets January 28, 2019 - March 16, 2019** W 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) SPH 0305 ONLINE
0103	Lindsey Winter **Meets January 28, 2019 - March 16, 2019** M 2:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 25) SPH 0303 ONLINE
0104	Lindsey Winter **Meets March 25, 2019 - May 14, 2019** M 2:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 25) SPH 0303 ONLINE
0105	Andrew Ginsberg **Meets January 28, 2019 - March 16, 2019** W 2:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 25) SPH 0307 ONLINE
0107	Brandon Lee **Meets January 28, 2019 - March 18, 2019** M 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) SPH 0302 ONLINE
0108	Brandon Lee **Meets March 25, 2019 - May 14, 2019** M 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) SPH 0302 ONLINE

KNES214 **Science and Methods of Personal Fitness Instruction**

Credits: 3 Grading Method: Regular General Education: DSSP

Credit only granted for: KNES214 or KNES210 and KNES211, or KNES210 and KNES212, or KNES289N. Formerly: KNES210/KNES211, KNES210/KNES212, and KNES289N.

Basic concepts of human anatomy, exercise physiology, applied kinesiology, nutrition and the physiology of exercise training. Includes the CORE knowledge required for the American Council on Exercise (ACE) Personal Trainer certification.

0101	Rosemary Lindle Class time/details on ELMs M 8:00am - 9:50am	Seats (Total: 25) ONLINE SPH 0305	 Lab
0102	Rosemary Lindle Class time/details on ELMs W 8:00am - 9:50am	Seats (Total: 25) ONLINE SPH 0305	 Lab

KNES222 **Gambling in the New Millennium: Poker, The Preakness, Point-spreads, Powerball and Public Policy**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Recommended: ENGL101 and COMM107.

Is gambling in the public interest? Students will critically examine the various implications of "what it means to gamble" through investigations of various gambling forms, different sectors of the gambling industry and the related economics, along with consumer behavior, sport, public policy and public health in this context.

0101	Stephen McDaniel MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 20) MCB 1207 SPH 0303	 Discussion
0102	Stephen McDaniel MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 20) MCB 1207 SPH 0303	 Discussion
0103	Stephen McDaniel MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 20) MCB 1207 SPH 0303	 Discussion
0104	Stephen McDaniel MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 20) MCB 1207 SPH 0303	 Discussion

KNES260 **Science of Physical Activity and Cardiovascular Health**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: LS | General Education: DSNS

Course details (1) the public health importance of and the processes underlying cardiovascular disease, (2) the risk factors for cardiovascular disease and the methods whereby they were identified, and (3) the principles of the scientific evidence supporting the use of physical activity to prevent cardiovascular disease.

0101	James Hagberg MW 3:00pm - 3:50pm M 9:00am - 9:50am	Seats (Total: 18) SPH 1303 SPH 0225	Discussion
0102	James Hagberg MW 3:00pm - 3:50pm M 10:00am - 10:50am	Seats (Total: 18) SPH 1303 SPH 0225	Discussion
0103	James Hagberg MW 3:00pm - 3:50pm M 11:00am - 11:50am	Seats (Total: 18) SPH 1303 SPH 0225	Discussion

KNES282 **Basic Care and Prevention of Athletic Injuries**

Credits: 3 | Grading Method: Regular, Pass-Fail

Restriction: Must be in a major within the SPHL-Kinesiology department. Credit only granted for: KNES282 or KNES381.

Theoretical and practical foundations of the prevention, treatment and rehabilitation of athletically related injuries. Topics include: physical conditioning, preventive taping, recognition of injuries, first aid and CPR.

0101	Joanne Klossner TuTh 2:00pm - 3:15pm	Seats (Total: 36) SPH 0308

KNES286 **Empowering Healthy Physical Activity**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Learn evidence-based techniques that health professionals use to promote physical activity programs that meet the needs of diverse populations. Develop and implement an intervention plan targeting a specific population.

0101	Andrea Romeo TuTh 9:30am - 10:45am	Seats (Total: 30) SPH 0302

KNES287 **Sport and American Society**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB, D | General Education: DSHS, DVUP

Sport will be related to such social problems as delinquency, segregation, collective behavior, and leisure; to social processes such as socialization, stratification, mobility, and social control; and to those familiar social institutions the family, the school, the church, the military, the economy, the polity, and the mass media.

Restricted to majors or non-majors with less than or equal to 45 credits.

0101	Shaun Edmonds MW 11:00am - 11:50am M 8:00am - 8:50am	Seats (Total: 22) JMZ 0220 SPH 0303	Discussion
0102	Shaun Edmonds MW 11:00am - 11:50am M 9:00am - 9:50am	Seats (Total: 22) JMZ 0220 SPH 0303	Discussion
0103	Shaun Edmonds MW 11:00am - 11:50am M 10:00am - 10:50am	Seats (Total: 22) JMZ 0220 SPH 0303	Discussion
0104	Shaun Edmonds MW 11:00am - 11:50am M 1:00pm - 1:50pm	Seats (Total: 22) JMZ 0220 SPH 0305	Discussion
0105	Shaun Edmonds MW 11:00am - 11:50am M 12:00pm - 12:50pm *Restricted to KNES (08351) new freshman or new transfer students.*	Seats (Total: 22) JMZ 0220 SPH 0305	Discussion
0106	Shaun Edmonds MW 11:00am - 11:50am M 3:00pm - 3:50pm *Restricted to KNES (08351) new freshman or new transfer students.*	Seats (Total: 22) JMZ 0220 SPH 0305	Discussion

KNES289 **Topical Investigations**

(Perm req)

Credits: 1-3 | Grading Method: Regular, Pass-Fail

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Prerequisite: permission of department.

Contact department for information to register for this course.

KNES289R **Topical Investigations; Hoop Dreams: Black Masculinity & Sport**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

0101	Ronald Mower TuTh 5:00pm - 6:15pm	Seats (Total: 50) SPH 1301	

KNES289W **Topical Investigations; The Cybernetic Human**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNS, SCIS

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Can the profound and rapid technological advances experienced in the 21st century change what it means to be human or the nature of humanity? Emergent technologies, new materials, increased computer power, engineering innovations, and groundbreaking work in the sciences of cognition and action provide myriad opportunities for repairing and enhancing the human body and brain. Examines the ethical, social, and technological implications of an increasing synergism of technology and and the body in sports and the arts, at work or home, rehabilitating the the body and the brain, and society at large.

0101	Ross Miller MF 2:00pm - 2:50pm W 12:00pm - 12:50pm	Seats (Total: 20) CCC 1100 SPH 0301	Discussion
0102	Ross Miller MF 2:00pm - 2:50pm W 10:00am - 10:50am	Seats (Total: 20) CCC 1100 SPH 0301	Discussion
0103	Ross Miller MF 2:00pm - 2:50pm W 1:00pm - 1:50pm	Seats (Total: 20) CCC 1100 SPH 0301	Discussion

0104	Ross Miller MF 2:00pm - 2:50pm W 2:00pm - 2:50pm	Seats (Total: 20) CCC 1100 SPH 0301	Discussion

KNES293 **History of Sport in America**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SH | General Education: DSHS

The growth and development of sport in America. The transformation of sport within the perspective of American history, including class sport, professionalization, amateurism, and international involvement.

Restricted to Majors or non-majors with less than or equal to 45 credits.

0101	Michael Friedman MW 1:00pm - 1:50pm M 10:00am - 10:50am	Seats (Total: 22) SPH 1312 SPH 0305	Discussion
0102	Michael Friedman MW 1:00pm - 1:50pm M 11:00am - 11:50am	Seats (Total: 22) SPH 1312 SPH 0305	Discussion
0103	Michael Friedman MW 1:00pm - 1:50pm M 2:00pm - 2:50pm	Seats (Total: 22) SPH 1312 SPH 0305	Discussion
0104	Michael Friedman MW 1:00pm - 1:50pm W 10:00am - 10:50am	Seats (Total: 22) SPH 1312 SPH 0303	Discussion
0105	Michael Friedman MW 1:00pm - 1:50pm W 11:00am - 11:50am	Seats (Total: 22) SPH 1312 SPH 0303	Discussion
0106	Michael Friedman MW 1:00pm - 1:50pm W 2:00pm - 2:50pm *Restricted to KNES majors (08351).*	Seats (Total: 22) SPH 1312 SPH 0303	Discussion

KNES300 **Biomechanics of Human Motion**

Credits: 4 | Grading Method: Regular, Pass-Fail

Prerequisite: Minimum grade of C- in BSCI201. And 1 course with a minimum grade of C- from (MATH112, MATH113, MATH115); or (must have completed one General Education: Fundamental Studies-Math course with a minimum grade of C-; and must have math eligibility of MATH140 or higher). Recommended: PHYS121. Restriction: Must be in a major within SPHL-Kinesiology department.

The study of human movement and the physical and physiological principles upon which it depends. Body mechanics, posture, motor efficiency, sports, the performance of a typical individual and the influence of growth and development upon motor performance.

0101	Jae Kun Shim MW 3:00pm - 4:15pm Tu 8:00am - 9:50am	Seats (Total: 18) JMZ 0220 SPH 0223	 Lab
0102	Jae Kun Shim MW 3:00pm - 4:15pm Tu 10:00am - 11:50am	Seats (Total: 18) JMZ 0220 SPH 0223	 Lab
0103	Jae Kun Shim MW 3:00pm - 4:15pm Tu 12:00pm - 1:50pm	Seats (Total: 18) JMZ 0220 SPH 0223	 Lab
0104	Jae Kun Shim MW 3:00pm - 4:15pm Tu 2:00pm - 3:50pm	Seats (Total: 18) JMZ 0220 SPH 0223	 Lab
0105	Jae Kun Shim MW 3:00pm - 4:15pm Th 8:00am - 9:50am	Seats (Total: 18) JMZ 0220 SPH 0223	 Lab
0106	Jae Kun Shim MW 3:00pm - 4:15pm Th 10:00am - 11:50am	Seats (Total: 18) JMZ 0220 SPH 0223	 Lab
0107	Jae Kun Shim MW 3:00pm - 4:15pm Th 12:00pm - 1:50pm	Seats (Total: 18) JMZ 0220 SPH 0223	 Lab
0108	Jae Kun Shim MW 3:00pm - 4:15pm Th 2:00pm - 3:50pm	Seats (Total: 18) JMZ 0220 SPH 0223	 Lab

KNES300H **Biomechanics of Human Motion**

(Perm req)

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI201. And 1 course with a minimum grade of C- from (MATH112, MATH113, MATH115); or (must have completed one General Education: Fundamental Studies-Math course with a minimum grade of C-; and must have math eligibility of MATH140 or higher). Recommended: PHYS121. Restriction: Must be in a major within SPHL-Kinesiology department.

The study of human movement and the physical and physiological principles upon which it depends. Body mechanics, posture, motor efficiency, sports, the performance of a typical individual and the influence of growth and development upon motor performance.

0101	Jae Kun Shim MW 3:00pm - 4:15pm Contact instructor or department for details.	Seats (Total: 3) JMZ 0220	

KNES320 **Physiological Basis of Physical Activity and Human Health**

Credits: 4

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI201 and BSCI202. Restriction: Must be in Public Health Science program. Credit only granted for: KNES360 or KNES320.

A study of the responses and chronic adaptations to physical activity and exercise, with particular emphasis on the interaction between human health and physical activity. The laboratory component of course will focus on the assessment of physical activity and measurement of physiological adaptations to exercise. Students are expected to gain an understanding and appreciation for the benefits of physical activity and exercise in the context of public health.

Students must pay a $50.00 lab fee.

0101	Steven Prior TuTh 12:30pm - 1:45pm M 12:00pm - 1:50pm	Seats (Total: 20) SPH 1312 SPH 0225	 Lab
0102	Steven Prior TuTh 12:30pm - 1:45pm M 2:00pm - 3:50pm	Seats (Total: 20) SPH 1312 SPH 0225	 Lab
0103	Steven Prior TuTh 12:30pm - 1:45pm W 8:00am - 9:50am	Seats (Total: 20) SPH 1312 SPH 0225	 Lab

0104	Steven Prior TuTh 12:30pm - 1:45pm W 10:00am - 11:50am	Seats (Total: 20) SPH 1312 SPH 0225	Lab
0105	Steven Prior TuTh 12:30pm - 1:45pm W 12:00pm - 1:50pm	Seats (Total: 20) SPH 1312 SPH 0225	Lab
0106	Steven Prior TuTh 12:30pm - 1:45pm W 2:00pm - 3:50pm	Seats (Total: 20) SPH 1312 SPH 0225	Lab

KNES332 **Exercise Testing and Prescription for the Fitness Professional**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES360. Restriction: Must be in a major within SPHL-Kinesiology department. Credit only granted for: KNES332 or KNES389G. Formerly: KNES389G.

Practical applications of exercise physiology and psychology to target fitness instruction for the general adult population Includes discussion of certification standards and professional development as well as evaluation of program safety and current trends.

0101	Jo Zimmerman WF 8:00am - 9:50am	Seats (Total: 25) SPH 0308

KNES332H **Exercise Testing and Prescription for the Fitness Professional**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES360. Restriction: Must be in a major within SPHL-Kinesiology department. Credit only granted for: KNES332 or KNES389G. Formerly: KNES389G.

Practical applications of exercise physiology and psychology to target fitness instruction for the general adult population Includes discussion of certification standards and professional development as well as evaluation of program safety and current trends.

0101	Jo Zimmerman WF 8:00am - 9:50am	Seats (Total: 2) SPH 0308

KNES333 **Motor Development and Fitness for Individuals with Disabilities**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in KNES287 and KNES370. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 45 credits.

Implications of Federal and State regulations for planning and implementing motor development and physical fitness programs for individuals with disabilities. Evaluation strategies for assessing motor performance and fitness levels in educational programs for these individuals.

Students are required to choose a placement for a service-learning exper ience involving direct work with children who have disabilities. Studen ts may choose from a list of local schools (listed in the syllabus) that have special education programs; or they may complete this requirement at the Children's Developmental Clinic held on campus in the SPH (School of Public Health) building every Saturday 8:30a-12:30p.

0101	Dennis Vacante Th 7:00pm - 9:30pm	Seats (Total: 32) SPH 0308	

KNES335 **Swimming Pool Management**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Analysis of the position of the swimming pool manager. The systematic treatment of swimming pool water; swimming pool first aid; and laws pertaining to swimming pool operation. Qualifies the student for a pool operator's license in most Maryland counties.

0101	John Felts TuTh 11:00am - 12:15pm	Seats (Total: 35) ERC B0136	Lab

KNES350 **The Psychology of Sports**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS

An exploration of personality factors, including but not limited to motivation, aggression and emotion, as they affect sports participation and motor skill performance.

0101	Elizabeth Brown TuTh 2:00pm - 3:15pm	Seats (Total: 70) SPH 1303
0201	J Carson Smith TuTh 8:00am - 9:15am	Seats (Total: 70) SPH 1303

KNES350H **The Psychology of Sports**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS

An exploration of personality factors, including but not limited to motivation, aggression and emotion, as they affect sports participation and motor skill performance.

Prerequisite: permission of department.

0101	Elizabeth Brown TuTh 2:00pm - 3:15pm	Seats (Total: 2) SPH 1303
0201	J Carson Smith TuTh 8:00am - 9:15am	Seats (Total: 3) SPH 1303

KNES355 **Sport Management**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: KNES287. Restriction: Junior standing or higher; and must be in a major within the SPHL-Kinesiology department. Credit only granted for: KNES355 or KNES498M.

Application of concepts and issues related to management principles and business concerns across various sections of the sport industry. Principles pertaining to the management of sport organizations.

0101	Stephen McDaniel TuTh 12:30pm - 1:45pm	Seats (Total: 32) SPH 0307

KNES355H **Sport Management**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: KNES287. Restriction: Junior standing or higher; and must be in a major within the SPHL-Kinesiology department. Credit only granted for: KNES355 or KNES498M.

Application of concepts and issues related to management principles and business concerns across various sections of the sport industry. Principles pertaining to the management of sport organizations.

0101	Stephen McDaniel TuTh 12:30pm - 1:45pm	Seats (Total: 3) SPH 0307

KNES360 **Physiology of Exercise**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI202 and BSCI201; or permission of SPHL-Kinesiology department. Restriction: Must be in one of the following programs (Kinesiology; Public Health Science).

A study of the physiology of exercise, including concepts of work, muscular contraction, energy transformation, metabolism, oxygen debt, and nutrition and athletic performance. Emphasis on cardiovascular and respiratory function in relation to physical activity and training.

Students must pay a $50.00 lab fee.

0101	Sushant Ranadive MWF 12:00pm - 12:50pm Tu 8:00am - 9:50am	Seats (Total: 18) SPH 1312 SPH 0225	 Lab
	Restricted to students in the Kinesiology major (code: 08351).		
0102	Sushant Ranadive MWF 12:00pm - 12:50pm Tu 10:00am - 11:50am	Seats (Total: 18) SPH 1312 SPH 0225	 Lab
	Restricted to students in the Kinesiology major (code: 08351).		
0103	Sushant Ranadive MWF 12:00pm - 12:50pm Tu 12:00pm - 1:50pm	Seats (Total: 18) SPH 1312 SPH 0225	 Lab
	Restricted to students in the Kinesiology major (code: 08351).		
0104	Sushant Ranadive MWF 12:00pm - 12:50pm Tu 2:00pm - 3:50pm	Seats (Total: 18) SPH 1312 SPH 0225	 Lab
	Restricted to students in the Kinesiology major (code: 08351).		
0105	Sushant Ranadive MWF 12:00pm - 12:50pm Th 8:00am - 9:50am	Seats (Total: 18) SPH 1312 SPH 0225	 Lab
	Restricted to students in the Kinesiology major (code: 08351).		
0106	Sushant Ranadive MWF 12:00pm - 12:50pm Th 10:00am - 11:50am	Seats (Total: 18) SPH 1312 SPH 0225	 Lab
	Restricted to students in the Kinesiology major (code: 08351).		
0107	Sushant Ranadive MWF 12:00pm - 12:50pm Th 12:00pm - 1:50pm	Seats (Total: 18) SPH 1312 SPH 0225	 Lab
	Restricted to students in the Kinesiology major (code: 08351).		

0108	Sushant Ranadive	Seats (Total: 18)	
	MWF 12:00pm - 12:50pm Th 2:00pm - 3:50pm	SPH 1312 SPH 0225	Lab
	Restricted to students in the Kinesiology major (code: 08351).		

KNES360H **Physiology of Exercise**

(Perm req)

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI202 and BSCI201; or permission of SPHL-Kinesiology department. Restriction: Must be in one of the following programs (Kinesiology; Public Health Science).

A study of the physiology of exercise, including concepts of work, muscular contraction, energy transformation, metabolism, oxygen debt, and nutrition and athletic performance. Emphasis on cardiovascular and respiratory function in relation to physical activity and training.

Students must pay a $50.00 lab fee.

0101	Sushant Ranadive	Seats (Total: 3)	
	MWF 12:00pm - 12:50pm Contact instructor or department for details.	SPH 1312	
	Restricted to students in the Kinesiology major (code: 08351).		

KNES370 **Motor Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major within SPHL-Kinesiology department.

Motor development across the life span. The developmental sequences of motor skills from birth to old age; neuromaturation of neuromuscular system; analysis of the underlying mechanisms of motor skill development; and correlates of motor development.

0101	Tim Kiemel	Seats (Total: 18)	
	MW 3:00pm - 3:50pm M 8:00am - 8:50am	SPH 1312 SPH 0223	Discussion
0102	Tim Kiemel	Seats (Total: 18)	
	MW 3:00pm - 3:50pm M 9:00am - 9:50am	SPH 1312 SPH 0223	Discussion

0103	Tim Kiemel MW 3:00pm - 3:50pm M 10:00am - 10:50am	Seats (Total: 18) SPH 1312 SPH 0223	Discussion
0104	Tim Kiemel MW 3:00pm - 3:50pm M 11:00am - 11:50am	Seats (Total: 18) SPH 1312 SPH 0223	Discussion
0105	Tim Kiemel MW 3:00pm - 3:50pm M 12:00pm - 12:50pm	Seats (Total: 18) SPH 1312 SPH 0223	Discussion
0106	Tim Kiemel MW 3:00pm - 3:50pm M 1:00pm - 1:50pm	Seats (Total: 18) SPH 1312 SPH 0223	Discussion
0107	Tim Kiemel MW 3:00pm - 3:50pm W 9:00am - 9:50am	Seats (Total: 18) SPH 1312 SPH 0223	Discussion
0108	Tim Kiemel MW 3:00pm - 3:50pm W 10:00am - 10:50am	Seats (Total: 18) SPH 1312 SPH 0223	Discussion

KNES370H **Motor Development**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in a major within SPHL-Kinesiology department.

Motor development across the life span. The developmental sequences of motor skills from birth to old age; neuromaturation of neuromuscular system; analysis of the underlying mechanisms of motor skill development; and correlates of motor development.

Prerequisite: permission of department.

0101	Tim Kiemel MW 3:00pm - 3:50pm Contact instructor or department for details.	Seats (Total: 2) SPH 1312	

KNES385 **Motor Control and Learning**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major within SPHL-Kinesiology department.

Physiological and cognitive bases for motor control and their applications to the acquisition of movement skills and understanding of movement disorders. Topics include: neurophysiology, motor control theory, sensory/perceptual processes, perception-action coupling, information processing, memory, attention, individual differences, motivation, practice organization and role of feedback.

0101	Rodolphe Gentili MW 2:00pm - 2:50pm W 11:00am - 11:50am	Seats (Total: 18) SPH 1312 SPH 0223	 Discussion
0102	Rodolphe Gentili MW 2:00pm - 2:50pm W 12:00pm - 12:50pm	Seats (Total: 18) SPH 1312 SPH 0223	 Discussion
0103	Rodolphe Gentili MW 2:00pm - 2:50pm W 1:00pm - 1:50pm	Seats (Total: 18) SPH 1312 SPH 0223	 Discussion
0104	Rodolphe Gentili MW 2:00pm - 2:50pm F 8:00am - 8:50am	Seats (Total: 18) SPH 1312 SPH 0223	 Discussion
0105	Rodolphe Gentili MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 18) SPH 1312 SPH 0223	 Discussion
0106	Rodolphe Gentili MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 18) SPH 1312 SPH 0223	 Discussion
0107	Rodolphe Gentili MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 18) SPH 1312 SPH 0223	 Discussion
0108	Rodolphe Gentili MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 18) SPH 1312 SPH 0223	 Discussion

KNES385H Motor Control and Learning

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major within SPHL-Kinesiology department.

Physiological and cognitive bases for motor control and their applications to the acquisition of movement skills and understanding of movement disorders. Topics include: neurophysiology, motor control theory, sensory/perceptual processes, perception-action coupling, information processing, memory, attention, individual differences, motivation, practice organization and role of feedback.

Prerequisite: permission of department.

0101	Rodolphe Gentili MW 2:00pm - 2:50pm Contact instructor or department for details.	Seats (Total: 4) SPH 1312

KNES389 **Topical Investigations**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Prerequisite: permission of instructor and department. This class does NOT fulfill a KNES Options Requirement.

Contact department for information to register for this course.

KNES389D **Topical Investigations; Sport for Development**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Prerequisite: KNES287 with a C- or better.

0101	Timothy Henkel W 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 50) SPH 1302 ONLINE

KNES389E **Topical Investigations; Childrens Development Clinic**

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Students will be required to complete fingerprinting and background checks (at no cost to the students). A service-learning experience at the Children's Developmental Clinic in the SPH (School of Public Health) building each Saturday morning (8:30-12:30). It is designed to give students a one-on-one, hands-on experience in working with a child who has special educational needs in the areas of motor development, language, reading, and social skills. There are two training sessions and nine sessions with the children.

0101	Dennis Vacante	Seats (Total: 30)
	Sa 8:30am - 12:30pm	SPH 2101

KNES389K **Topical Investigations; Kinesiology Internship**

(Perm req)

Credits: 3 Grading Method: Regular

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Prerequisite: permission of instructor and department.

Contact department for information to register for this course.

KNES389M **Topical Investigations; Mental Performance Skills Coaching & Team Building: Turning Theory into Practice**

Credits: 3 Grading Method: Regular, Audit

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Prerequisite: Successful completion of KNES350 with a C- or better.

0101	Evan Brody	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	SPH 0303

KNES400 **The Foundations of Public Health in Kinesiology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES287. Restriction: Senior standing or higher; and must be in a major within the SPHL-Kinesiology department. Credit only granted for: KNES400 or KNES498A. Formerly: KNES498A.

An investigation of the role of physical activity and inactivity in relation to health and well-being through a public health perspective. Past and current perspectives on health promotion, health education, and social policies and approaches will be examined for various populations.

0101	Katelyn Esmonde MW 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 18) SPH 1312 SPH 0305	Discussion
0102	Katelyn Esmonde MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 18) SPH 1312 SPH 0305	Discussion
0103	Katelyn Esmonde MW 11:00am - 11:50am W 2:00pm - 2:50pm	Seats (Total: 18) SPH 1312 SPH 0305	Discussion
0104	Katelyn Esmonde MW 11:00am - 11:50am W 3:00pm - 3:50pm	Seats (Total: 18) SPH 1312 SPH 0305	Discussion
0105	Katelyn Esmonde MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 18) SPH 1312 SPH 0301	Discussion
0106	Katelyn Esmonde MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 18) SPH 1312 SPH 0301	Discussion

KNES400H **The Foundations of Public Health in Kinesiology**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES287. Restriction: Senior standing or higher; and must be in a major within the SPHL-Kinesiology department. Credit only granted for: KNES400 or KNES498A. Formerly: KNES498A.

An investigation of the role of physical activity and inactivity in relation to health and well-being through a public health perspective. Past and current perspectives on health promotion, health education, and social policies and approaches will be examined for various populations.

0101	Katelyn Esmonde MW 11:00am - 11:50am Contact instructor or department for details.	Seats (Total: 4) SPH 1312	

KNES405 **Principles & Techniques of Manual Muscle Testing**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in BSCI201, BSCI202, and KNES300.

It is critical for sports medicine and sport performance specialists to understand the location and inter-relationships of the structures of the body that impact human movement. Thus, the primary purpose of this course is to facilitate an in-depth, understanding of the muscles of the body. Specifically, students will learn the origins, insertions, primary and secondary functions, as well as nervous innervations of the major muscle groups of the body. In addition, students will develop palpation skills and learn to grade the function of each muscle through manual muscle testing techniques. These skills form the foundation for assessing functional movement as well as performing safe and effective manual therapy techniques. Thus, while the focus of the class will be to develop sound, introductory palpation and manual muscle testing skills, basic principles of functional movement and manual therapy will also be addressed through hands-on application as well as case study.

0101	Larry Plotkin, Joanne Klossner	Seats (Total: 20)
	TuTh 9:30am - 10:45am	SPH 0301

KNES442 **Psychology of Exercise and Health**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: KNES350. Restriction: Junior standing or higher. Credit only granted for: KNES442 or KNES498O. Formerly: KNES498O.

Examines the antecedents and consequences of exerciese behavior. Explores motivation, attitude, control, socialization. Proposes intervention strategies at the individual, organizational and societal levels.

0101	Seppo Iso-Ahola	Seats (Total: 30)
	M 4:00pm - 6:30pm	SPH 1302

KNES442H **Psychology of Exercise and Health**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: KNES350. Restriction: Junior standing or higher. Credit only granted for: KNES442 or KNES498O. Formerly: KNES498O.

Examines the antecedents and consequences of exerciese behavior. Explores motivation, attitude, control, socialization. Proposes intervention strategies at the individual, organizational and societal levels.

0101	Seppo Iso-Ahola M 4:00pm - 6:30pm	Seats (Total: 2) SPH 1302

KNES451 **Children and Sport: A Psychosocial Perspective**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: KNES350. Restriction: Junior standing or higher; and must be in a major within SPHL-Kinesiology department.

Examination of youth sports from a psychosocial perspective, including the impact of highly structured sports on young athletes and the complex social network of coaches, parents and peers.

0101	Elizabeth Brown Tu 4:00pm - 6:30pm	Seats (Total: 50) SPH 1302

KNES451H **Children and Sport: A Psychosocial Perspective**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: KNES350. Restriction: Junior standing or higher; and must be in a major within SPHL-Kinesiology department.

Examination of youth sports from a psychosocial perspective, including the impact of highly structured sports on young athletes and the complex social network of coaches, parents and peers.

Prerequisite: permission of department.

0101	Elizabeth Brown Tu 4:00pm - 6:30pm	Seats (Total: 3) SPH 1302

KNES457 **Managing Youth Programs: Educational, Fitness and Sport**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: KNES370 and KNES287. Restriction: Junior standing or higher. Credit only granted for: KNES457 or KNES498Y.

An examination of the basic functions involved in managing physical education, fitness, and youth sports programs. Focus on leadership skills, organizational management, and techniques for applying learned skills in a variety of organizational settings that serve the nation's youth.

0101	Jay Goldstein	Seats (Total: 35)
	TuTh 9:30am - 10:45am	ESJ B0320

KNES460 **Physiology of Aging and the Impact of Physical Activity**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: KNES360. Credit only granted for: KNES498F or KNES460. Formerly: KNES498F.

Biology of the aging process in healthy individuals and those with chronic disease, the effects of acute exercise and exercise training on the physiological decline that occurs in humans, and the role that regular physical activity plays on enhancing the quality of life and activities of daily living in individuals.

0101	Marc Rogers	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	SPH 0307

KNES460H **Physiology of Aging and the Impact of Physical Activity**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: KNES360. Credit only granted for: KNES498F or KNES460. Formerly: KNES498F.

Biology of the aging process in healthy individuals and those with chronic disease, the effects of acute exercise and exercise training on the physiological decline that occurs in humans, and the role that regular physical activity plays on enhancing the quality of life and activities of daily living in individuals.

0101	Marc Rogers	Seats (Total: 3)
	TuTh 11:00am - 12:15pm	SPH 0307

KNES461 **Exercise and Body Composition**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: KNES360.

An in-depth overview on how body composition is measured, what it is composed of, and the physiological and biochemical signals that change it. The effects of acute and chronic exercise on food storage, breakdown, and use as an energy source, is the major focus. This information is applied to important issues in public health and athletic performance.

0101	Ben Hurley	Seats (Total: 33)
	TuTh 9:30am - 10:45am	SPH 0308

KNES461H **Exercise and Body Composition**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: KNES360.

An in-depth overview on how body composition is measured, what it is composed of, and the physiological and biochemical signals that change it. The effects of acute and chronic exercise on food storage, breakdown, and use as an energy source, is the major focus. This information is applied to important issues in public health and athletic performance.

Prerequisite: permission of department.

0101	Ben Hurley TuTh 9:30am - 10:45am	Seats (Total: 2) SPH 0308

KNES464 **Exercise Metabolism: Role in Health and Disease**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI202, KNES360, and BSCI201. Credit only granted for: KNES464 or KNES498L.

Examines the role of metabolism in kinesiology, especially as it relate to physical inactivity, health and disease. Includes bioenergetics, substrate utilization, cell signaling, and metabolic gene expression and their impact on chronic health conditions or disease.

0101	Sarah Glancy TuTh 8:00am - 9:15am	Seats (Total: 29) ATL 2416

KNES464H **Exercise Metabolism: Role in Health and Disease**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI202, KNES360, and BSCI201. Credit only granted for: KNES464 or KNES498L.

Examines the role of metabolism in kinesiology, especially as it relate to physical inactivity, health and disease. Includes bioenergetics, substrate utilization, cell signaling, and metabolic gene expression and their impact on chronic health conditions or disease.

0101	Sarah Glancy TuTh 8:00am - 9:15am	Seats (Total: 3) ATL 2416

KNES465 **Physical Activity and Disease Prevention and Treatment**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: KNES360. Credit only granted for: KNES465 or KNES498A.

Critically examines the scientific evidence that supports the use of physical activity to prevent and treat age-related diseases, including cardiovascular disease, diabetes, abnormal lipoprotein-lipid levels, hypertension, obesity, osteoporosis and cancer.

0101	Sushant Ranadive	Seats (Total: 27)
	TuTh 9:30am - 10:45am	HBK 0103

KNES465H **Physical Activity and Disease Prevention and Treatment**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: KNES360. Credit only granted for: KNES465 or KNES498A.

Critically examines the scientific evidence that supports the use of physical activity to prevent and treat age-related diseases, including cardiovascular disease, diabetes, abnormal lipoprotein-lipid levels, hypertension, obesity, osteoporosis and cancer.

0101	Sushant Ranadive	Seats (Total: 3)
	TuTh 9:30am - 10:45am	HBK 0103

KNES472 **Computational Motor Control and Learning: Engineering the Mind**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Successful completion of KNES 385 (Motor Control and Learning) with a C- or better or an equivalent undergraduate or graduate course in motor neuroscience. Recommended: Recommended: Basic knowledge of Matlab or MS Excel.

This course critically examines how computational motor neurosciences can provide a theoretical framework to understand the underlying cognitive/sensori-motor control and learning processes in human. In particular, the internal model theory is presented and discussed through complementary, interdisciplinary approaches, which include human behavioral and neuroimaging experiments, neurophysiology and neural modeling. Applications discussed in this course include various motor rehabilitation and assistive technology (e.g., neuroprostheses) approaches.

0101	Rodolphe Gentili	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	PLS 1115

KNES477 **Honors Thesis**

(Perm req) Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: KNES476. Corequisite: KNES478. Restriction: Must be a KNES Honors student; and senior standing. Credit only granted for: KNES399 or KNES477.

Advisement will be on the individual basis. Thesis must be defended in the honors seminar.

0101	Tim Kiemel F 10:00am - 10:50am Contact instructor or department for details.	Seats (Total: 10) SPH 0301

KNES478 Honors Seminar; Honors Seminar

(Perm req) Credits: 1 Grading Method: Regular

Guided discussion of research topics of current interest.

0101	Tim Kiemel F 11:00am - 11:50am	Seats (Total: 20) SPH 0301

KNES483 Sport Marketing and Media

Credits: 3 Grading Method: Regular, Audit

Prerequisite: KNES287. Restriction: Junior standing or higher; and must be in a major within SPHL-Kinesiology department.

Industry practices in sport marketing and media. Marketing strategies and consumer behavior in different sport contexts. Critical examination of selected social and economic issues related to the buying and selling of sport.

0101	Stephen McDaniel TuTh 11:00am - 12:15pm	Seats (Total: 32) SPH 0305

KNES483H Sport Marketing and Media

(Perm req) Credits: 3 Grading Method: Regular, Audit

Prerequisite: KNES287. Restriction: Junior standing or higher; and must be in a major within SPHL-Kinesiology department.

Industry practices in sport marketing and media. Marketing strategies and consumer behavior in different sport contexts. Critical examination of selected social and economic issues related to the buying and selling of sport.

0101	Stephen McDaniel	Seats (Total: 2)
	TuTh 11:00am - 12:15pm	SPH 0305

KNES484 **Sporting Hollywood**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: KNES293 and KNES287. Restriction: Junior standing or higher. Credit only granted for: KNES484 and KNES498N.

Popular representations of sport within the film media related to wider social discourses on bodies and the politics of various categories of subjectivity (gender, sexual, racial, class and national).

0101	Michael Friedman	Seats (Total: 30)
	MW 3:30pm - 4:45pm	AJC 2119

KNES485 **Sport and Globalization**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVUP

Prerequisite: KNES287. Restriction: Junior standing or higher.

Examination of sport culture from a global perspective; focuses on theorizing the similarities and differences between various national sporting cultures.

0101	David Andrews	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

KNES497 **Kinesiology Senior Seminar**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

Prerequisite: A professional writing course with a minimum grade of C-; and must have completed 6 KNES core courses and 2 KNES option courses, all with a C- or higher; and must have completed STAT100 with a C- or better. Restriction: Senior standing or higher; and must be in Kinesiology program; and permission of department.

Discussions of contemporary issues vital to the discipline, critiques of research in the student's area/areas of special interest, completion of a major project where the student will be asked to demonstrate the ability to carry out investigative processes in problem solving and critical writing under faculty direction.

Click here for more information.

0102	Ronald Mower TuTh 3:30pm - 4:45pm	Seats (Total: 20) ATL 0201
	Historicizing Modern Sport, Physical Education, and Physical Culture	
0103	James Hagberg Tu 8:00am - 10:30am	Seats (Total: 20) SPH 0305
	"Physical Activity and the Obesity and Diabetes Epidemic"	
0104	Shaun Edmonds Tu 4:00pm - 6:30pm	Seats (Total: 20) SPH 0223
	Physical Activity for Everyone: Qualitative and Quantitative Approaches	
0106	Joanne Klossner TuTh 11:00am - 12:15pm	Seats (Total: 20) ATL 2416
	"Hot Topics in Sports Medicine"	
0108	Ross Miller W 8:00am - 10:30am	Seats (Total: 20) JMP 1109
	Biomechanical Forces and Human Musculoskeletal Health	
0109	Jo Zimmerman M 8:00am - 10:30am	Seats (Total: 20) JMP 1109
	Exercise & Brain Health: From Psychobiology to Behavior.	
0110	Evan Brody Tu 4:00pm - 6:30pm	Seats (Total: 20) SPH 0225
	Applied Sport and Exercise Psychology for Practitioners.	
0112	Jennifer Roberts W 4:00pm - 6:30pm	Seats (Total: 20) SPH 0305
	Physical Activity and the Built Environment in Kinesiology	
0114	Steven Prior M 11:00am - 1:30pm	Seats (Total: 20) SPH 0308
	Physical Activity, Aging, and Cardiovascular Disease	
0115	Kyle Jaquess W 4:00pm - 6:30pm	Seats (Total: 20) SPH 0302
	Biopsychology of Human Learning and Performance	

KNES498 **Special Topics in Kinesiology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest in areas not covered by regularly scheduled courses.

This class does NOT fulfill a KNES Options Requirement.

Contact department for information to register for this course.

KNES498J **Special Topics in Kinesiology; Equity & Diversity: Contemporary Issues in Physical Activity Participation and Health**

Credits: 3

Grading Method: Regular, Audit

Topics of special interest in areas not covered by regularly scheduled courses.

Prerequisite: KNES287 with a C- or better An exploration of the politics, policies and practices contributing to prejudicial and discriminatory attitudes that influence health and physical activity preferences and participation. Students will begin to develop cultural competence foundational to understanding how to promote equality in physical activity and health related programs involving a diverse population of children, families, patients, or clients.

0101	Shaun Edmonds	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ATL 2428

KNES498T **Special Topics in Kinesiology; Principles and Applications of Exercise Rehabilitation**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest in areas not covered by regularly scheduled courses.

Prerequisites: KNES300/KNES300H and KNES360/KNES360H. Students will learn the basic principles of exercise and rehabilitation of commonly seen injuries in a clinical setting. They will also learn basic assessment techniques, review normal ranges of motion, and determine how the function of the muscles directly affects the rehabilitation process.

0101	Larry Plotkin	Seats (Total: 35)
	TuTh 8:00am - 9:15am	SPH 0307

KNES498W **Special Topics in Kinesiology; Prosthetics for Limb Amputations**

Credits: 3

Grading Method: Regular, Pass-Fail

Topics of special interest in areas not covered by regularly scheduled courses.

Prerequisite: KNES300. Introduction to the science of prosthetics and the artificial devices that are designed, developed and fit to replace the missing body part or parts lost through trauma, disease or congenital conditions.

0101	Douglas Collier	Seats (Total: 35)
	Tu 1:00pm - 3:30pm	CCC 1111

KNES601 **Epidemiology of Physical Activity**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: KNES600; and must have completed an undergraduate statistics course (e.g., STAT100 or equivalent).

An exploration of basic epidemiological study design, methods, and health outcomes in the field of physical activity.

0101	Jennifer Roberts	Seats (Total: 15)
	Tu 4:00pm - 6:30pm	SPH 2334

KNES602 **Physical Activity Program Planning and Evaluation**

Credits: 3 Grading Method: Regular, Audit

Recommended: KNES600.

An in-depth analysis of the planning, implementation, and evaluation of physical activity interventions and programs intended to achieve physical activity and public health goals.

0101	Brit Saksvig	Seats (Total: 10)
	W 1:00pm - 3:30pm	SPH 2334

KNES609 **Research Issues in Kinesiology**

(Perm req)

Credits: 1 Grading Method: Regular

Issues, methodologies, and critical analyses of current research in Kinesiology.

Contact department for information to register for this course.

KNES610 **Methods and Techniques of Research**

Credits: 3 Grading Method: Regular, Audit

Studies methods and techniques of research used in Kinesiology; an analysis of examples of their use; and practice in their application to problems of interest to the student.

0101	Seppo Iso-Ahola W 4:00pm - 6:30pm	Seats (Total: 15) SPH 0303

KNES618 **Current Readings in Exercise and Applied Physiology**

Credits: 1 Grading Method: Regular, Audit

Student-led presentations of contemporary literature in the areas of genetics, exercise science, fitness and health. Emphasis on papers describing new research findings, novel techniques, innovative methods, and emerging issues.

0101	James Hagberg F 1:00pm - 1:50pm	Seats (Total: 15) SPH 2334

KNES672 **Computational Motor Control and Learning: Engineering the Mind**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: KNES 385 (Motor Control and Learning) or an equivalent undergraduate or graduate course in motor neuroscience. Recommended: Recommended: Basic knowledge of Matlab or MS Excel.

This course critically examines how computational motor neurosciences can provide a theoretical framework to understand the underlying cognitive/sensori-motor control and learning processes in human. In particular, the internal model theory is presented and discussed through complementary, interdisciplinary approaches, which include human behavioral and neuroimaging experiments, neurophysiology and neural modeling. Applications discussed in this course include various motor rehabilitation and assistive technology (e.g., neuroprostheses) approaches.

0101	Rodolphe Gentili TuTh 2:00pm - 3:15pm	Seats (Total: 10) PLS 1115

KNES689 **Special Problems in Kinesiology**

(Perm req)

Credits: 1-6 Grading Method: Regular

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

Contact department for information to register for this course.

KNES689N **Special Problems in Kinesiology; Curriculum Development in Physical Education**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

IH60	Cara Grant	Seats (Total: 15)
	Tu 4:30pm - 7:30pm	Location: TBA

KNES689O **Special Problems in Kinesiology; Psychology of Exercise and Health**

Credits: 3 Grading Method: Regular, Audit

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

0101	Seppo Iso-Ahola	Seats (Total: 5)
	M 4:00pm - 6:30pm	SPH 1302

KNES689T **Special Problems in Kinesiology; Teaching Internship**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

Outreach Secondary MCERT-KNES. Departmental permisson required. Students are required to pay a course fee; refer to program materials for details.

CE01	Cara Grant	Seats (Total: 10)
	Contact instructor or department for details.	

KNES785 **Internship in Physical Activity and Public Health**

Credits: 3 Grading Method: Regular

Prerequisite: EPIB610, EPIB650, HLSA601, HLTH665, KNES600, KNES601, and MIEH600. Recommended: KNES602. Credit only granted for: KNES778 or KNES785.

The internship is a time-limited, supervised period of public/community health activities carried out in a health or allied health organization involved with physical activity. Students gain practical experience in areas such as program planning and implementation, program evaluation, public policy analysis, research, and management.

0101	Shannon Jette	Seats (Total: 5)
	Contact instructor or department for details.	

KNES786 **Capstone Project in Physical Activity and Public Health**

Credits: 3 Grading Method: Regular

Prerequisite: KNES600, KNES601, and KNES602.

The culminating experience in which the student applies knowledge and skills learned in the MPH program to conduct independent work on a physical activity problem under the supervision of a faculty advisor.

0101	Shannon Jette	Seats (Total: 5)
	Contact instructor or department for details.	

KNES789 **Advanced Projects in Kinesiology**

Credits: 1-3 Grading Method: Regular

Advanced projects examining current problems and trends in kinesiology.

Contact department for information to register for this course.

KNES789P **Advanced Projects in Kinesiology; PCS Research and Writing Seminar**

Credits: 3 Grading Method: Regular

Advanced projects examining current problems and trends in kinesiology.

0101	David Andrews	Seats (Total: 15)
	M 4:00pm - 6:30pm	SPH 2334

KNES789R **Advanced Projects in Kinesiology; Brain Dynamics and EEG: Applications to Cognitive-motor Performance**

Credits: 3 Grading Method: Regular

Advanced projects examining current problems and trends in kinesiology.

Prerequisites: NACS641 (Introduction to Neuroscience), and one of KNES689D (Special Problems in Kinesiology: Physiological Signal processing course. This course covers the theory and practice of electroencephalography, which includes, but not limited to, the basic principles of EEG (synaptic sources, volume conduction, electrodes, recording techniques, etc.), various EEG rhythms that reflect cognitive processing, signal processing, conventional analytic methods such as event-related potentials and spectral analysis as well as computational approaches like source localization and functional connectivity. This course may provide coverage of other electrography such as electrooculography (EOG) electromyography (EMG), and electrocardiography (ECG or EKG).

0101	Hyuk Oh	Seats (Total: 15)
	TuTh 4:00pm - 5:15pm	PLS 1146

KNES789W **Advanced Projects in Kinesiology; Modeling & Simulation of Human Movement**

Credits: 3 Grading Method: Regular

Advanced projects examining current problems and trends in kinesiology.

Development of physics-based models for simulating the biomechanics of human movement on computers.

0101	Ross Miller	Seats (Total: 10)
	Th 4:00pm - 6:30pm	SPH 2334

KNES799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

KNES898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

KNES899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

KORA Korean Spring 2019

KORA102 **Elementary Korean II**

Credits: 3 Grading Method: Regular

Prerequisite: KORA101; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must be a non-Heritage student; and permission of instructor required for new students.

Continued training in elementary spoken and written Korean.

0101	Seong Minne Koh MWF 10:00am - 10:50am	Seats (Total: 15) JMZ 1224
0201	Seong Minne Koh MWF 11:00am - 11:50am	Seats (Total: 15) TWS 1320
0301	Younghi Ramsey, So-Hye Park MWF 2:00pm - 2:50pm	Seats (Total: 15) JMZ 2123

KORA202 **Intermediate Korean II**

Credits: 3 Grading Method: Regular CORE: HO

Prerequisite: KORA201; or permission of instructor.

The second stage of an intermediate-level course designed for non-Heritage students. It continues the second year of instruction in the University's two track Korean Program.

0101	Younghi Ramsey, So-Hye Park MWF 11:00am - 11:50am	Seats (Total: 15) JMZ 2123
0201	Younghi Ramsey, So-Hye Park MWF 1:00pm - 1:50pm	Seats (Total: 15) JMZ 2117

KORA345 **Korean Language and Linguistics**

Credits: 3 Grading Method: Regular

Prerequisite: KORA102 or KORA211; or permission of ARHU-School of Languages, Literatures, and Cultures department. Credit only granted for: KORA345 and KORA399A.

An exploration of Korean language and society, in particular the role and nature of the alphabet, Korean sounds, lexical and grammatical structures, and usage in today's South Korea.

This course fulfills one Korean studies elective requirement for the KORA minor.

0101	Samuel Ramsey MW 2:00pm - 3:15pm	Seats (Total: 20) JMZ 1124

KORA398J **Special Topics in Korean Studies; Controversies in Contemporary Korea**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Study of particular aspect of Korean language, literature, and/or culture. Topic and language of instruction to be announced when course is offered.

This is a Big Ten Academic Alliance Course-Share course. The instructor, Prof. Juhn Ahn, is at the University of Michigan. UMD students enroll and attend the class at UMD. This course examines a number of key controversies in modern and contemporary Korea (South and North). Through this examination this course will seek to provide a more critical understanding of the issues that drive the political economy and culture of Korea. Among other things, this course will examine the issue of comfort women, Park Chung-hee's authoritarian-developmentalist regime, the economic influence of chaebolconglomerates like Samsung, Kwangju 5.18 and democratization, theculture of consumption and commodification in contemporary Korea, horrors of the Korean War, gender and class struggle, environmental policy in Korea, globalization and the Korean Wave (Hallyu), conflict with North Korea and China, Korea and U.S. hegemony, the impact of the IMF or Asian financial crisis, the Sewol tragedy, youth unemployment, the history textbook controversy, Choi Soon-sil, and mokpang.

0101	Instructor: TBA	Seats (Total: 12)	
	TuTh 4:00pm - 5:30pm	JMZ 2117	

KORA499 **Independent Study Korean**

(Perm req)

Credits: 1-3 Grading Method: Regular

Independent study under faculty supervision.

Contact department for information to register for this course.

LARC Landscape Architecture Spring 2019

LARC120 **Digital Fundamentals**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Permission of AGNR-Plant Science & Landscape Architecture department; and must be in Landscape Architecture program.

An introduction to fundamental computer tools and techniques commonly used in design communication and landscape architecture practice. Non-drafting computer tools will be used to orient basic digital image capture, manipulation, and presentation formatting.

0101	Che-Wei Yi	Seats (Total: 20)	
	Tu 2:00pm - 2:50pm	PLS 2137	
	Tu 3:00pm - 4:40pm	PLS 2137	Lab

LARC151 **Urban Agriculture: Designing and Assessing Edible Landscapes**

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

Students will examine the growing development of urban agriculture and edible landscapes. Urban agriculture has seen a recent growth and interest in cities across the globe. From Paris to New York, from Baltimore to Detroit, urban agriculture is an emerging land use to address a variety of needs. Redevelopment, food deserts, community engagement and environmental justice are just some of the issues and topics that are connected to the recent growth of urban agriculture. This course will take a critical examination of urban agriculture's contribution to the food system, its input and outputs in the urban landscape, and the planning and design of urban agriculture and edible landscapes.

0101	Dennis Nola MW 11:00am - 11:50am M 12:00pm - 12:50pm	Seats (Total: 20) PLS 1140 PLS 1164	 Discussion
0102	Dennis Nola MW 11:00am - 11:50am M 1:00pm - 1:50pm	Seats (Total: 20) PLS 1140 PLS 1164	 Discussion
0103	Dennis Nola MW 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 20) PLS 1140 PLS 1162	 Discussion
0104	Dennis Nola MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 20) PLS 1140 PLS 1162	 Discussion
0105	Dennis Nola MW 11:00am - 11:50am M 12:00pm - 12:50pm	Seats (Total: 20) PLS 1140 PLS 1115	 Discussion

LARC160 **Introduction to Landscape Architecture**

Credits: 3 Grading Method: Regular CORE: HO General Education: DSHU, DSSP

History, theory, philosophy and current practice of the profession of landscape architecture. Explores the interactive relationship between humans and their environment by examining people's perceptions of and changing attitude towards the landscape, as well as, an examination of how these are related to ecological and cultural influences.

0101	Christiane Machado MW 10:00am - 10:50am M 11:00am - 11:50am	Seats (Total: 19) PLS 1140 PLS 1113	 Discussion
0102	Christiane Machado MW 10:00am - 10:50am M 12:00pm - 12:50pm	Seats (Total: 19) PLS 1140 PLS 1113	 Discussion
0103	Christiane Machado MW 10:00am - 10:50am W 12:00pm - 12:50pm	Seats (Total: 19) PLS 1140 PLS 1115	 Discussion
0104	Christiane Machado MW 10:00am - 10:50am W 1:00pm - 1:50pm	Seats (Total: 18) PLS 1140 PLS 1115	 Discussion
0105	Christiane Machado MW 10:00am - 10:50am W 12:00pm - 12:50pm	Seats (Total: 20) PLS 1140 PLS 1113	 Discussion

LARC221 **Digital Design Tools**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: LARC120 and LARC141. Recommended: LARC240 and LARC265. Restriction: Sophomore standing or higher; and must be in Landscape Architecture program.

The development and application of computing skills as used by the landscape architecture profession. This Computer-Aided Design and Drafting (CADD) course develops computer drafting using a variety of software programs. It also introduces students to Geographic Information Systems (GIS) mapping technologies.

0101	Kelley Oklesson TuTh 11:00am - 12:15pm TuTh 12:30pm - 1:45pm	Seats (Total: 15) PLS 2137 PLS 2137	 Lab

LARC240 **Graphic Communication and Design Studio**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: LARC141 and LARC263. Corequisite: LARC221 and LARC265. Restriction: Sophomore standing or higher; and must be in Landscape Architecture program.

Exploration of graphic presentation techniques and original concept development for landscape architecture planning and design.

0101	Michael Ezban	Seats (Total: 15)	
	MW 2:00pm - 2:50pm	PLS 2152	
	MW 3:00pm - 4:50pm	PLS 2152	Lab

LARC263 **History of Landscape Architecture**

Credits: 3 Grading Method: Regular CORE: HA General Education: DSHU

A survey of landscape architecture history from the ancient Western civilizations to the twentieth century with consideration of parallel developments in the Eastern World, European Africa and the Americas.

0101	Caren Yglesias	Seats (Total: 20)
	TuTh 9:30am - 10:45am	PLS 1119
	For LARC majors only.	
0102	Caren Yglesias	Seats (Total: 10)
	TuTh 9:30am - 10:45am	PLS 1119

LARC321 **Landscape Structures and Materials**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: LARC320; and LARC340. Restriction: Must be in Landscape Architecture program.

An examination of the use, properties, and detailing of materials used in landscape construction. The use and design of structures in the landscape.

0101	Daniel Straub	Seats (Total: 15)	
	TuTh 9:30am - 10:45am	PLS 1111	
	Th 11:00am - 12:15pm	PLS 2150	Lab

LARC341 **Regional Design Studio**

(Perm req)

Credits: 5 Grading Method: Regular

Prerequisite: LARC320; and LARC340. Restriction: Junior standing or higher; and must be in Landscape Architecture program.

An examination of the landscape architect's role within the interdisciplinary regional design field incorporating GIS technologies, spatial modeling, and the regional design process.

A Partnership for Action Learning in Sustainability (PALS) course where students apply classroom learning to actual community needs.

0101	David Myers	Seats (Total: 15)	
	MW 1:00pm - 1:50pm	PLS 2150	
	MW 2:00pm - 4:50pm	PLS 2150	Lab

LARC471 **Capstone Studio: Community Design**

(Perm req)

Credits: 5 Grading Method: Regular CORE: CS

Prerequisite: LARC440; and LARC470. Restriction: Senior standing; and must be in Landscape Architecture program.

A capstone experience that emphasizes the integration of critical thinking skills and methodologies introduced throughout the landscape architecture curriculum. Students apply design and analysis methodologies, evaluate alternative solutions, involve community residents and engage in final design development, using the master plan and site design process, report writing, and oral and graphic presentations. Final presentations are open to the university and the community.

A Partnership for Action Learning in Sustainability (PALS) course where students apply classroom learning to actual community needs.

0101	Victoria Chanse	Seats (Total: 15)	
	M 1:00pm - 1:50pm	PLS 2148	
	W 2:00pm - 2:50pm	PLS 2148	
	W 3:00pm - 5:50pm	PLS 2148	Lab
	M 2:00pm - 4:50pm	PLS 2148	Lab

LARC489E **Special Topics in Landscape Architecture; Planting Design**

(Perm req)

Credits: 3 Grading Method: Regular

Credit according to time scheduled and organization of course. A lecture and/or studio course organized as an in-depth study of a selected specialization of landscape architecture not covered by existing courses.

0101	Ann Anderson	Seats (Total: 10)	
	F 9:00am - 11:50am	PLS 0104	

LARC499 **Independent Studies in Landscape Architecture**

(Perm req)

Credits: 1-4 Grading Method: Regular

Independent studies in landscape architecture including field, studio o library research under the direction of a faculty member.

Contact department for information to register for this course.

LARC641 **Graduate Studio II**

(Perm req)

Credits: 5 Grading Method: Regular, Audit

Prerequisite: LARC640. Corequisite: LARC720. Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

Principles and techniques of site analysis, environmental design and site development for human settlements and interaction with natural systems. Will expand analytical skills through complex site design problems. Students will research, observe and apply low impact development and sustainable practices, become familiar with building and landscape types by investigating alternative arrangements on the land, and understand user needs and design for populations with a range of abilities. Will support LEED and sustainable practices and acknowledge the requirements of public health, safety, and welfare.

A Partnership for Action Learning in Sustainability (PALS) course where students apply classroom learning to actual community needs.

0101	Dennis Nola	Seats (Total: 10)	
	TuTh 1:00pm - 1:50pm	PLS 1142	
	TuTh 2:00pm - 4:50pm	PLS 1142	Lab

LARC648 **Graduate Studio IV**

(Perm req)

Credits: 5 Grading Method: Regular, Audit

An exploration that will focus on issues in landscape planning and design such as campus planning, urban housing and recreation, and neighborhood preservation, restoration and development. Projects will emphasize the value of responsible academic and civic landscapes, the place of historic resources in contemporary life, and innovative solutions for the integration of past and future landscapes.

An exploration that will focus on issues in landscape planning and design such as campus planning, urban housing and recreation, and neighborhood preservation, restoration and development. Projects will emphasize the value of responsible academic and civic landscapes, the place of historic resources in contemporary life, and innovative solutions for the integration of past and future landscapes.

0101	Jack Sullivan	Seats (Total: 10)	
	TuTh 1:00pm - 1:50pm	PLS 2154	
	TuTh 2:00pm - 4:50pm	PLS 2154	Lab

LARC663 **Landscape and Garden History**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

History of garden making and its evolution into design practice. Students will become familiar with narratives of garden art and landscape architecture through the study of selected key sites, designers, and visual written sources. A focus on gardens' past and afterlife; the nature of primary sources (both built and written), and how these can be evaluated and used. Primary sources will be drawn from several disciplines and include a wide array of genres: treatises, epistolary exchanges, tax returns, novels, poems, paintings and drawings.

0101	Jack Sullivan	Seats (Total: 10)
	Tu 9:30am - 10:45am	PLS 0104
	Tu 11:00am - 12:15pm	PLS 0104

LARC671 **Landscape Architecture Research Methods**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

Investigation and discussion of broad scope of research methods and the development of landscape design and planning research techniques and skills. The urban environment will be viewed primarily as a social and psychological environment, with concern for who uses these environments and the conflicts that can arise between user groups.

0101	Victoria Chanse	Seats (Total: 15)
	W 10:00am - 12:50pm	PLS 1172

LARC699 **Independent Studies in Landscape and Architecture**

(Perm req)

Credits: 1-3 Grading Method: Regular

Individual Instruction course.

Contact department for information to register for this course.

LARC720 **Environmental Analysis and Site Engineering**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LARC640; or permission of AGNR-Plant Science & Landscape Architecture department. Corequisite: LARC641.

Techniques for prediction of alterations in social and natural processe brought about by human use of the land; application of such assessments to environmental management; basic methods of landscape alteration, augmentation, and control including grading, drainage, road and trail design, and stormwater management.

0101	Joseph Burkhardt Th 8:00am - 9:50am Th 10:00am - 11:50am	Seats (Total: 10) PLS 1142 PLS 1142	 Lab

LARC799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Development of a terminal thesis on a problem in landscape architecture, designed to demonstrate comprehensive skills and knowledge achieved in the graduate program. The subject will be selected in consultation with an advisor and periodically reviewed with a committee headed by the advisor.

Contact department for information to register for this course.

LASC Certificate in Latin American Studies Spring 2019

LASC235 **Issues in Latin American Studies II**

Credits: 3 Grading Method: Regular CORE: HO, D General Education: DSHS, DSHU, DVUP

Also offered as: SPAN235, PORT235. Credit only granted for: LASC235, PORT235, or SPAN235.

Major issues shaping Latin American and Caribbean societies including the changing constructions of race, ethnicity, gender and class as well as expressions of popular cultures and revolutionary practices. A continuation of LASC/PORT/SPAN234, but completion of 234 is not a prerequisite. Taught in English.

0101	Britta Anderson TuTh 11:00am - 12:15pm	Seats (Total: 30) BPS 1238
0201	Britta Anderson TuTh 9:30am - 10:45am	Seats (Total: 30) JMZ 2206

LASC235H **Issues in Latin American Studies II**

Credits: 3 Grading Method: Regular CORE: HO, D General Education: DSHS, DSHU, DVUP

Also offered as: SPAN235, PORT235. Credit only granted for: LASC235, PORT235, or SPAN235.

Major issues shaping Latin American and Caribbean societies including the changing constructions of race, ethnicity, gender and class as well as expressions of popular cultures and revolutionary practices. A continuation of LASC/PORT/SPAN234, but completion of 234 is not a prerequisite. Taught in English.

0201	Britta Anderson TuTh 9:30am - 10:45am	Seats (Total: 5) JMZ 2206

LASC251 **Latin America Since Independence**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DVUP

Also offered as: HIST251. Credit only granted for: HIST251 or LASC251.

Introductory survey of the history of Latin America from the era of independence (c. 1810-1825) through the early 1980s. Major themes include independence and sovereignty, postcolonialism and neocolonialism, nation- and state-building, liberalism, citizenship, economic development and modernization, social organization and stratification, race and ethnicity, gender relations, identity politics, reform and revolution, authoritarianism and democratization, and inter-American relations.

0101	Karin Rosemblatt MW 2:00pm - 3:15pm	Seats (Total: 60) TYD 2106

LASC269D **Special Topics in Study Abroad II; Human Rights and Cultural Representations**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

LASC269R **Special Topics in Study Abroad II; Race and Nation in Argentina**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

LASC286 **Internship in Latin American/Caribbean Studies**

(Perm req)

Credits: 1-6 | Grading Method: Regular, Pass-Fail

Prerequisite: LASC234, SPAN234, LASC235, SPAN235, LASC250, HIST250, LASC251, or HIST251; and permission of Latin American Studies Center required. Restriction: Minimum cumulative GPA of 2.5; and cannot have more than 60 credits total. Additional information: The course is primarily intended for students seeking the Certificate in Latin American Studies, but exceptions will be considered for students with educational or career interests which lie in this area. Student internships must be approved by the Director and students must secure an appropriate faculty mentor to supervise the internship course.

Internship experience with an organization that works with or studies Latin American and/or the Caribbean. This is an experiential learning course that provides semester-long training that enriches the student's academic field of study and the LASC Certificate. Students submit a final written report of how the experience ties into their major field of study.

Contact department for information to register for this course.

LASC348E **Special Topics in Latin American Studies; Caribbean Literature**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Topics to be announced when offered.

Also offered as ENGL362. Credit granted for ENGL362 or LASC348E.

0101	Merle Collins	Seats (Total: 27)
	TuTh 11:00am - 12:15pm	TWS 0221

LASC448O **Special Topics in Latin American Studies; The Classical Tradition in Spain and Latin America**

Credits: 3 | Grading Method: Regular

Intensive study of a selected topic related to Latin American Studies.

Also offered as CLAS419B and SPAN418C. Credit granted for LASC448O, CLAS419B or SPAN418C. A survey of the reception of Classical literature in the Spanish-speaking world, with a particular focus on ancient drama. We read select literary works in translation, ranging from Renaissance Spain to contemporary Latin America, side-by-side with their classical models, to examine what is culturally unique about their choice of authors, themes, and adaptation of the material. Students have the option of reading some works in the original.

0101	Francisco Barrenechea	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	SQH 1105

LASC448W **Special Topics in Latin American Studies; Doing Business in Nicaragua: Microfinance and Social Value Creation**

Credits: 3 | Grading Method: Regular

Intensive study of a selected topic related to Latin American Studies.

Contact department for information to register for this course.

LASC486 **Internship in Latin American/Caribbean Studies**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail

Prerequisite: Student must have completed at least two LASC courses, one of which must be a required/core course (LASC/SPAN234, LASC/SPAN235, LASC/HIST250, or LASC/HIST251); and permission of Latin American Studies Center required. Restriction: Minimum cumulative GPA of 2.5; and must have earned a minimum of 60 credits. Additional information: The course is primarily intended for students seeking the Certificate in Latin American Studies, but exceptions will be considered for students with educational or career interests which lie in this area. Student internships must be approved by the Director, and students must secure an appropriate faculty mentor for the internship course. An internship course will be approved only if a faculty supervisor is available.

Internship experience with an organization that works with or studies Latin American and/or the Caribbean. This is an experiential learning course that provides semester-long training that enriches the student's academic field of study and the LASC Certificate. Students submit a final written report of their experience, including critical analysis of the institutional relevance to their major field of study and to Latin American Studies. Students will also be asked to give an oral presentation.

Contact department for information to register for this course.

LASC499 **Independent Study in Latin American Studies**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Independent Study in Latin American Studies.

Contact department for information to register for this course.

LATN Latin Spring 2019

LATN101 **Elementary Latin I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Additional information: A student who has two units of Latin in high school may register for LATN101 for the purposes of review, but ordinarily not for credit.

0101	Eugenia Lao	Seats (Total: 25)	
	MWF 10:00am - 10:50am	HBK 0105	
	W 9:00am - 9:50am	HBK 0105	Discussion

LATN201 **Intermediate Latin**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: Must have completed LATN102 at University of Maryland, College Park; or permission of ARHU-Classics department. Formerly: LATN203.

0101	Robert Matera	Seats (Total: 15)	
	MWF 10:00am - 10:50am	JMZ 3122	
	W 9:00am - 9:50am	JMZ 3122	Discussion

LATN302 **Ovid**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Major works of Ovidian poetry. Literary and moral atmosphere of Augustan age. Readings are in Latin.

0101	Robert Matera	Seats (Total: 10)
	MWF 11:00am - 11:50am	WDS 0104

LATN405 **Lucretius**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Readings are in Latin.

0101	Jorge Bravo	Seats (Total: 5)
	M 5:00pm - 7:40pm	MMH 1218

LATN415 **Vergil's Aeneid**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Formerly: LATN305.

Vergil's Aeneid: readings of selections in Latin and of the entire epic in English translation along with critical essays.

0101	Gregory Staley	Seats (Total: 7)
	W 5:00pm - 7:40pm	MMH 1218

LATN499 **Independent Study in Latin Language and Literature**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

LATN605 **Vergil**

Credits: 3

Grading Method: Regular, Audit

A study of Vergil's development as a literary artist and Augustan poet through readings in the Eclogues, Georgics, and Aeneid.

0101	Gregory Staley W 5:00pm - 7:40pm	Seats (Total: 7) MMH 1218

LATN688L **Special Topics in Latin Literature; Lucretius**

Credits: 3

Grading Method: Regular, Audit

0101	Jorge Bravo M 5:00pm - 7:40pm	Seats (Total: 8) MMH 1218

LATN699 **Independent Studies in Latin Literature**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Contact department for information to register for this course.

LATN799 **Master's Thesis Research**

(Perm req)

Credits: 1-6

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

LBSC Library Science Spring 2019

LBSC602 **Serving Information Needs**

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC602, or both LBSC601 and LBSC650.

An introduction to the skills necessary to interact directly with individuals through the exploration of user behavior theory, strategies to locate and evaluate information from print and electronic resources, and policies and procedures to ensure that all individuals can become information literate.

0101	Beth St Jean Th 6:00pm - 8:45pm	Seats (Total: 30) HBK 0109
ML01	Ursula Gorham-Oscilowski Class time/details on ELMs	Seats (Total: 25) ONLINE
ML02	Ursula Gorham-Oscilowski Class time/details on ELMs	Seats (Total: 30) ONLINE

LBSC611 **History of the Book**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC611 or LBSC078B. Formerly: LBSC708B.

Introduction to the history and development of the book from pre-printing and incunabula to the post-modern book. Book illustration; publishing; collecting.

0101	Stephen Greenberg M 6:00pm - 8:45pm	Seats (Total: 30) HBK 0109

LBSC631 **Achieving Organizational Excellence**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC631 or LBSC635.

Overview of the principles, practices, and techniques required for effective leadership and management. The innovative strategies, management responsibilities, and skills needed to achieve and sustain high organizational performance in information-based cultural institutions.

0101	Philip Piety Th 6:00pm - 8:45pm	Seats (Total: 30) CHM 1228
ML01	Bruce Dearstyne Class time/details on ELMs	Seats (Total: 25) ONLINE

LBSC641 **Selecting and Evaluating of Resources for Learning**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies.

Policies and procedures for collection development, including identifying, evaluating, acquiring, providing, and promoting resources in all formats, to support learning and teaching in elementary and secondary schools.

CT01	Jennifer Sturge Class time/details on ELMs	Seats (Total: 25) ONLINE
ML01	Jennifer Sturge Class time/details on ELMs	Seats (Total: 25) ONLINE

LBSC646 **Literature and Materials for Young Adults**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC646 or LBSC746. Formerly: LBSC746.

Survey of literature and other materials for older children and adolescents. Criteria for evaluating and using such materials as they relate to the needs, interests, reading abilities, and other capabilities of young readers.

ML01	Ashleigh Coren Class time/details on ELMs	Seats (Total: 25) ONLINE

LBSC671 **Creating Information Infrastructures**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC671, or LBSC670 and LBSC690.

Foundations of acquiring and managing collections, information structures, indexing and discovery systems needed by information professionals. An introduction to the theoretical concepts, trends, systems, and technologies central to the information field.

0101	Katy Lawley M 6:00pm - 8:45pm	Seats (Total: 30) HBK 0123

CT01	Pratima Kshetry Class time/details on ELMs	Seats (Total: 25) ONLINE
ML01	Maggie Dull Class time/details on ELMs	Seats (Total: 25) ONLINE

LBSC703 **Field Study in Archives and Digital Curation**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LBSC602, LBSC631, and LBSC671; and must have completed 9 additional credits. Or permission of instructor. Restriction: Must be in Library and Information Science (Master's) program; and permission of INFO-College of Information Studies.

Supervised internship experience in archives or digital curation programs in organizations and institutions.

0101	Kenneth Heger Th 6:00pm - 8:45pm	Seats (Total: 25) HBK 0103

LBSC707 **Field Study in Information Service**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LBSC602, LBSC671, and LBSC631; and must have completed an additional 9 credits. Or permission of instructor. Restriction: Must be in Library and Information Science (Master's) program; and permission of INFO-College of Information Studies.

Supervised internship experience in a library, archive, museum, or other information organization.

ML01	Suzy Wilson Class time/details on ELMs	Seats (Total: 25) ONLINE

LBSC709 **Independent Study**

Credits: 1-3 Grading Method: Regular, Audit

Intensive individual study, reading, or research in an area of specialized interest under faculty supervision.

Signed independent study form must be presented to CLIS Admissions Office.

Contact department for information to register for this course.

LBSC713 **Planning and Evaluating Library and Information Services**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LBSC602; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

An investigation of quantitative and qualitative methods used to plan and evaluate the effectiveness of library and information services. Planning and evaluation methodologies will be analyzed and critiqued. Selected methods will be demonstrated and/or utilized.

ML01	Abbie Basile	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

LBSC734 **Seminar in the Academic Library**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LBSC602; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Role of the academic library within the framework of higher education. Planning programs and services, collections, support, fiscal management, physical plant, and cooperation.

0101	Lindsay Carpenter	Seats (Total: 30)
	Tu 6:00pm - 8:45pm	HBK 0123

LBSC742 **Collaborative Instructional Design and Evaluation**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INST650; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

School librarians' collaborative role in instruction. Systematic design development, and evaluation of instructional strategies and products for learning.

ML01	Renee Hill	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

LBSC749 **Internship in School Libraries**

Credits: 1-6 Grading Method: Regular, Audit

Opportunities to observe and participate in the operation of school libraries at the elementary and secondary levels under the supervision of certified school librarians. Required of all School Library Media certification candidates.

Contact department for information to register for this course.

LBSC786 **Library and Archives Preservation**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INST604; and permission of instructor. Restriction: Permission of INFO-College of Information Studies.

An introduction to library and archives materials and media, the risks that affect their preservation and strategies used to enhance preservation of library and archives collections. The course reviews preservation knowledge and skills that archival and library staff uses when providing access, managing, processing and working with collections.

0101	Beatriz Haspo W 6:00pm - 8:45pm	Seats (Total: 25) HBK 2119

LBSC791 **Designing Principled Inquiry**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LBSC671, LBSC602, and LBSC631; and additional 9 credits of coursework applied to the MLIS degree. Or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Critical analysis of roles of information professions and institutions in integrating theory, methods, practice, policies, and values of the field, and applying them to the design of future information systems and services.

0101	Paul Jaeger Tu 6:00pm - 8:45pm	Seats (Total: 25) HBK 0103
ML01	Eric Hung Class time/details on ELMs	Seats (Total: 25) ONLINE

LGBT Lesbian Gay Bisexual Transgender Studies Spring 2019

LGBT200 **Introduction to Lesbian, Gay, Bisexual, and Transgender Studies**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SB, D	General Education: DSHS, DVUP

Credit only granted for: LGBT200.

An interdisciplinary study of the historical and social contexts of personal, cultural and political aspects of LGBT life. Sources from a variety of fields, such as anthropology, history, psychology, sociology, and women's studies, focusing on writings by and about LGBT people.

0101	Sydney Lewis MWF 9:00am - 9:50am	Seats (Total: 30) WDS 1114
0201	Sydney Lewis MWF 11:00am - 11:50am	Seats (Total: 30) SQH 1121

LGBT265 **Lesbian, Gay, Bisexual, and Transgender Literatures**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HL, D	General Education: DSHU, DVUP

Restriction: Must not have completed ENGL265. Also offered as: ENGL265. Credit only granted for: ENGL265 or LGBT265.

Exploration of literary and cultural expressions of sexuality and gender. Study of a range of historical periods and literary genres, such as essay, poetry, novel, drama, film. Topics include sexual norms and dissidence, gender identity and expression, the relationship between aesthetic forms and sexual subjectivity. Interpretation of texts particularly through the lens of queer theory. Examination of how sex and gender intersect with other forms of difference, including race and class.

0101	Aqdas Aftab TuTh 12:30pm - 1:45pm	Seats (Total: 30) TLF 1103
0201	John Macintosh MWF 1:00pm - 1:50pm	Seats (Total: 30) TWS 0236

LGBT298T **Special Topics in Lesbian, Gay, Bisexual, and Transgender Studies; Gender and Sexuality in Israeli Cinema**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	, D	General Education: DVUP

Study of particular themes and issues in LGBT studies.

Also offered as ISRL249K, FILM298K, JWST219B, and WMST298T. Credit only granted for ISRL249K, JWST219B, FILM298K, WMST298T, or LGBT298T. This course will explore the different ways gender and sexuality have been represented in Israeli Cinema over time. We will examine notions of "manhood" and "womanhood" within the Israeli social context, as well as look at examples of outliers, exceptions, transgressors, and pariahs. We will investigate different types of representations of gender and sexuality, asking how they configure secular society, the Orthodox/ Haredi religious community, the LGBTQ community, the Arab/Palestinian communities, the Israeli soldier population, and more.

0101	Shalom Rosenberg	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	TWS 1321

LGBT359B **Special Topics in Lesbian, Gay, Bisexual, and Transgender Literatures; Black Sexuality in Literature and Film**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Study of selected writers or particular themes in Lesbian, Gay, Bisexual and Transgender literatures.

Also offered as ENGL359B. Credit only granted for ENGL359B or LGBT359B. Prerequisite: Two lower-level English courses, at least one in literature; or permission of ARHU-English department. Repeatable to 9 credits if content differs.

0101	GerShun Avilez	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	TWS 1107

LGBT359M **Special Topics in Lesbian, Gay, Bisexual, and Transgender Literatures; . Queer Comedy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Study of selected writers or particular themes in Lesbian, Gay, Bisexual and Transgender literatures.

Also offered as ENGL359C. Credit only granted for ENGL359C or LGBT359M. Prerequisite: Two lower-level English courses, at least one in literature; or permission of ARHU-English department. Repeatable to 9 credits if content differs.

0101	Martha Nell Smith	Seats (Total: 25)
	MW 2:00pm - 3:15pm	TWS 0205

LGBT386 **Lesbian, Gay, Bisexual, and Transgender Community Organization Internship**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP, DVCC

Prerequisite: 9 credits in LGBT courses. Restriction: Permission of LGBT Studies Program.

Supervised internship experience with a community organization that expressly serves lesbian, gay, bisexual, and transgender people. Students will be expected to relate course material to experience in an analysis of an organization's activities.

Contact department for information to register for this course.

LGBT398Q **Special Topics in Lesbian, Gay, Bisexual, and Transgender Studies; Queer History of Classics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVUP

In-depth study of particular themes and issues in LGBT studies.

Also offered as CLAS309Q, HIST328Q, and WMST379Q. Credit granted for CLAS309Q, HIST328Q, WMST379Q, and LGBT398Q. In Classics and Queer History, we will explore ancient and modern paradigms of sex, gender, and sexuality and discuss queer uses of and struggles with the past and the idea of the Classical. To do this, we will examine diverse works of ancient Greek and Roman literature and visual art, as well as works from later periods sonnets, operas, novels, films, scholarship, and more that adapt ancient stories and ideas for their own, queer purposes. As we move across time, geography, and cultures, we will keep in mind the over-arching questions, what is queer history, and why might one pursue it?

0101	Robert Matera	Seats (Total: 30)
	MWF 2:00pm - 2:50pm	VMH 1207

LGBT448O **Special Topics in Lesbian, Gay, Bisexual, and Transgender Studies; Queer and Feminist Thought in Latina/o America**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit , D | General Education: DVUP

In-depth study of particular themes and issues in LGBT studies.

Also offered as USLT498O. Credit only granted for LGBT448O or USLT498O. This course will investigate how queer and feminist subjects in Latin America and the Latina/o U.S. engage questions of gender and sexuality, and also politics and culture. Using thought as our framework, we will use an expansive lens to understand how thinking is also a way of doing across a range of activities, from theoretical texts to activist movements to artistic practices and more. We will read foundational work from thinkers such as Gloria Anzaldua, Rigoberta Menchu, Jose Esteban Munoz, Juana Maria Rodriguez, and others. We will also read novels and poetry from writers including Raquel Gutierrez, Justin Torres, and Myriam Gurba. This course will also focus on performance and contemporary art practices to help us illuminate the many complexities of thinking gender and sexuality across the Americas. All texts will be read in English, no previous knowledge of Spanish required.

0101	Ivan Ramos	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	WDS 1114

LGBT488R **Seminar in Lesbian, Gay, Bisexual, and Transgender Studies; The Bad Feelings of Race, Gender, and Sexuality**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Developments in theories and methods of LGBT Studies, with emphasis upo interaction between the humanities and the social sciences in the elaboration of this interdisciplinary area of scholarship.

"Pride" is often used as the feeling we are told people defined by difference should feel about their identity. This course turns away from constant demand for us to feel good about identity and asks, what happen when we look instead at moments when race, gender, and sexuality make us feel bad? The point of this course is not to make us feel bad, but rather to recognize how such moments invite us to find different approaches that go beyond models of inclusion. We will read work by scholars such as Sianne Ngai, Juana Maria Rodriguez, Darieck Scott, Amber Musser, Michel Foucault, Valerie Solanas, Karen Shimakawa, and others.

0101	Ivan Ramos	Seats (Total: 12)	
	Tu 4:00pm - 6:30pm	WDS 1127	

LGBT499 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Directed research and analysis in LGBT Studies on a topic selected by the student.

Contact department for information to register for this course.

LING Linguistics Spring 2019

LING200 **Introductory Linguistics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

Credit only granted for: HESP120 or LING200. Additional information: Does not count toward the Linguistics major and does not fulfill prerequisite requirements for all upper-level courses.

An exploration of the nature of human language, designed for non-majors Introduction to the basic concepts and methodology of modern linguistic analysis (sound systems, word formation, sentence structure). Additional topics may include: semantics, pragmatics, social aspects of language, dialects, language change, acquisition, writing systems, typology, language universals, comparison with other communication systems, etc.

0101	Tonia Bleam	Seats (Total: 30)	
	MW 1:00pm - 1:50pm	MMH 1400	
	F 2:00pm - 2:50pm	MMH 1304	Discussion

0104	Tonia Bleam MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 30) MMH 1400 MMH 1304	Discussion
0105	Tonia Bleam MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 30) MMH 1400 MMH 1304	Discussion
0107	Tonia Bleam MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 30) MMH 1400 MMH 1304	Discussion

LING240 **Language and Mind**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU

Additional information: Required for Linguistics majors and recommended for students in related fields.

The study of language as a cognitive phenomenon. Focus on mastering the concepts and technical skills required for further courses in linguistics. Ways of representing people's knowledge of their native language, ways in which that knowledge is attained naturally by children, and how it is used in speaking and listening. Additional topics may include: animal communication, language and the brain, language and thought.

0101	Margaret Antonisse MWF 10:00am - 10:50am	Seats (Total: 50) SQH 1119

LING248 **Introduction to Laboratory Research in Linguistics**

(Perm req)

Credits: 3 | Grading Method: Regular

Individualized, collaborative research course aimed at developing skills for laboratory research in language acquisition, sentence processing or neurolinguistics. Learning to conduct research in laboratory linguistics as part of a research team that will create original research in the field.

Prerequisite: Permission of ARHU-Linguistics department.

0101	Jeffrey Lidz F 10:00am - 11:30am Contact instructor or department for details.	Seats (Total: 15) MMH 1108B

LING262 **HERITAGE LANGUAGES AND THEIR SPEAKERS**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Additional information: One class per week will be in-field instruction in collecting data from heritage speakers.

An interdisciplinary examination of the phenomenon of heritage language (a bilingual's home language which is distinct from the dominant language of the wider society). Relationship between linguistic structure, cultural and social aspects of language use, and language change. Interpretations of experimental and theoretical work. Relevance of heritage languages for linguistic theory, language policy, and education.

0101	Maria Polinsky	Seats (Total: 30)
	TuTh 9:30am - 10:45am	MMH 1304

LING311 **Syntax I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: LING240.

Basic concepts, analytical techniques of generative syntax, relation to empirical limits imposed by viewing grammars as representations of a component of human mind. Aspects of current theories.

0101	Tonia Bleam	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	MMH 1304

LING312 **Syntax II**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: LING311.

Continuation of LING311. Development of theories of syntax. Criteria fo revising theories. Methods and strategies of scientific efforts to explain natural phenomena.

0101	Omer Preminger	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	MMH 1304

LING321 **Phonology I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: LING240.

Properties of sound systems of human languages, basic concepts and analytical techniques of generative phonology. Empirical limits imposed by viewing grammars as cognitive representations. Physiological properties and phonological systems; articulatory phonetics and distinctive feature theory.

0101	Margaret Antonisse	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	MMH 1304

LING322 **Phonology II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: LING321.

Continuation of LING321. Further investigation of phonological phenomen and phonological theory. Revising and elaborating the theory of the phonological representation; interaction of phonology and morphology.

0101	Maxime Papillon	Seats (Total: 20)
	MW 3:30pm - 4:45pm	MMH 1304

LING350 **Philosophy of Language**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHIL170 or LING311. Also offered as: PHIL360. Credit only granted for: LING350 or PHIL360.

The nature and function of language and other forms of symbolism from a philosophical perspective.

0101	Alexander Williams	Seats (Total: 27)
	TuTh 9:30am - 10:45am	KEY 0103

LING419M **Topics in Syntax; Expressing Possibilities and Necessities across Languages and Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics vary.

This course examines the syntax and semantics of modal expressions, i.e., words that express possibilities and necessities (must, maybe, want) in different languages and their acquisition.

0101	Annemarie van Dooren	Seats (Total: 10)
	TuTh 12:30pm - 1:45pm	MMH 1304

LING420 **Word Formation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: LING321 and LING311.

Examination of shape and meaning of possible words, both across languages and within particular languages. Interaction between principles of word formation and other components of a grammar: syntax, logical form and phonology.

0101	Paulina Lyskawa	Seats (Total: 20)
	MW 12:00pm - 1:15pm	MMH 1304

LING444 **Child Language Acquisition**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: LING311.

Examines language acquisition in infancy and early childhood: the natur of children's linguistic representations and how these develop naturally. Role of (possible) innate linguistic structure and interaction of such structure with experience. Evaluation of methods and results of current and classic research leading to contemporary models of language development.

0101	Jeffrey Lidz	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	MMH 1108B

LING448 **Advanced Laboratory Research in Linguistics**

(Perm req)

Credits: 2-3 Grading Method: Regular

Individualized, collaborative research course aimed at developing skills for laboratory research in language acquisition, sentence processing or neurolinguistics. Conducting a research project in laboratory linguistics as part of a team creating original research relevant to current issues in linguistics.

Prerequisite: Permission of ARHU-Linguistics department.

0101	Jeffrey Lidz	Seats (Total: 15)
	F 10:00am - 11:30am Contact instructor or department for details.	MMH 1108B

LING499 **Directed Studies in Linguistics**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Independent study or research on language under the supervision of a faculty member.

Contact department for information to register for this course.

LING499C **Directed Studies in Linguistics; Teaching Assistantship**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Independent study or research on language under the supervision of a faculty member.

0101	Margaret Antonisse Contact instructor or department for details.	Seats (Total: 4)
0102	Tonia Bleam Contact instructor or department for details.	Seats (Total: 4)

LING499H **Directed Studies in Linguistics**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Independent study or research on language under the supervision of a faculty member.

Contact department for information to register for this course.

LING611 **Issues in Syntax**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: LING610.

Topics of current theoretical interest examined through data from a variety of languages.

0101	Norbert Hornstein, Omer Preminger M 2:00pm - 5:00pm	Seats (Total: 15) MMH 3416K

LING621 **Issues in Phonology**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: LING620.

Topics of current interest in phonological theory examined through data from several languages.

0101	William Idsardi	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	MMH 1401G

LING641 **Issues in Psycholinguistics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LING640.

Topics of current interest in psycholinguistics, including both theoretical approaches and experimental and analytical issues in language acquisition, language processing, and neurolinguistics.

0101	Colin Phillips	Seats (Total: 15)
	MW 12:00pm - 1:30pm	MMH 1108B

LING689 **Independent Study**

Credits: 1-3 Grading Method: Regular, Audit

Independent studies in grammatical theory.

Contact department for information to register for this course.

LING689T **Independent Study; Pedagogy for Linguistics**

Credits: 1 Grading Method: Regular

Independent studies in grammatical theory.

Designed for novice instructors to collaboratively explore and evaluate methodologies that support teaching improvement and learner achievement.

0101	Tonia Bleam	Seats (Total: 6)
	Contact instructor or department for details.	

LING698 **Directed Study; Seminar**

Credits: 1-3 Grading Method: Regular, Audit

0101	Howard Lasnik	Seats (Total: 2)
	F 2:00pm - 5:00pm	Location: TBA

LING798 **Research Papers in Linguistics**

(Perm req) Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

LING799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

LING819E **Seminar in Syntactic Theory; Conceptions of the Cycle**

Credits: 3 Grading Method: Regular, Audit

Current topics in research on syntactic theory.

0101	Howard Lasnik, Juan Uriagereka	Seats (Total: 15)
	W 2:00pm - 5:00pm	MMH 1108B

LING849C **Seminar in Psycholinguistics; Computational Psycholinguistics**

Credits: 3 Grading Method: Regular, Audit

Current topics in research on psycholinguistics.

Also offered as NACS728W. Credit only granted for LING849C or NACS728W.

0101	Naomi Feldman	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	MMH 1108B
	Also offered as NACS728V. Credit only granted for LING849C or NACS728V.	

LING879C **Seminar in Semantics**

Credits: 3 Grading Method: Regular, Audit

Current topics in research in semantics.

0101	Alexander Williams	Seats (Total: 15)
	M 2:00pm - 5:00pm	MMH 1108B

LING888 **Doctoral Research Paper**

Credits: 1-6 Grading Method: Regular, Audit

Students will strengthen their abilities to formulate coherent research questions, conduct research and create a publishable piece of work. In addition, the course is part of a set of requirements to advance to doctoral candidacy.

0101	Howard Lasnik Contact instructor or department for details.	Seats (Total: 5)
0201	Norbert Hornstein Contact instructor or department for details.	Seats (Total: 5)
0401	Jeffrey Lidz Contact instructor or department for details.	Seats (Total: 5)
0601	Juan Uriagereka Contact instructor or department for details.	Seats (Total: 5)
0801	William Idsardi Contact instructor or department for details.	Seats (Total: 5)
0901	Philip Resnik Contact instructor or department for details.	Seats (Total: 5)
1001	Maria Polinsky Contact instructor or department for details.	Seats (Total: 5)
1201	Colin Phillips Contact instructor or department for details.	Seats (Total: 5)
1401	Valentine Hacquard Contact instructor or department for details.	Seats (Total: 5)
1501	Alexander Williams Contact instructor or department for details.	Seats (Total: 5)
1601	Naomi Feldman Contact instructor or department for details.	Seats (Total: 5)
1701	Ellen Lau Contact instructor or department for details.	Seats (Total: 5)
1801	Omer Preminger Contact instructor or department for details.	Seats (Total: 5)

LING889 Directed Research

Credits: 1-8 Grading Method: Regular, Audit

Contact department for information to register for this course.

LING896 **Research Paper in Minor Area**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: LING888.

This course is designed to strengthen the students' ability to do research in a minor area of expertise, and to help them create a publishable piece. In addition, the course constitutes part of a set of requirements to advance to doctoral candidacy.

Contact department for information to register for this course.

LING898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

LING899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

MAIT Masters in the Mathematics of Advanced Industrial Tech Spring 2019

MAIT679A **Special Topics in Mathematics of Advanced Industrial Technology**

Credits: 3 Grading Method: Regular, Audit

Special topics courses are intended to expose students to the latest developments in mathematical applications. As such, the content will vary depending on the instructor and the current state-of-the-art. 679 will appear with a letter appended to distinguish different topics. New 679 courses will be added as areas of interest arise.

Contact department for information to register for this course.

MAIT699 **Independent Masters Project**

Credits: 1-3 Grading Method: Regular, Audit

This course allows students to apply advanced mathematical methods to practical, real-world problems. Projects are supervised individually by faculty members from the MAIT Program. The project's nature is flexible and determined jointly by the student and supervisor. A detailed final report must be prepared by the student and approved by the supervisor.

0101	John Benedetto Contact instructor or department for details.	Seats (Total: 5)
0102	Wojciech Czaja Contact instructor or department for details.	Seats (Total: 1)
0501	John Benedetto Contact instructor or department for details.	Seats (Total: 10)
0902	Wojciech Czaja Contact instructor or department for details.	Seats (Total: 10)
2911	Andrew Kebo Contact instructor or department for details.	Seats (Total: 5)

MATH Mathematics Spring 2019

MATH003 **Developmental Mathematics**

Credits: 3 Grading Method: Sat-Fail

A review of Intermediate High School Algebra intended for students preparing for one of the credit bearing Fundamental Studies Math Courses. It is taught in special computer labs using a self-paced computer program. The curriculum will be geared toward the student's level of algebra skills and eventual goals. There is a special fee for the course that may be applied in addition to the regular tuition charge. Students should refer to the schedule of classes for details on fees as they apply to a particular semester. The course does not carry any credit toward any degree at the University. The course is repeatable. Topics will be chosen from exponents, polynomials, linear equations, quadratic equations as well as polynomial, rational, exponential and logarithm functions and elementary probability or statistics, depending on the student.

Students must pay a special math fee.

0601	Colleen Terpos TuTh 8:00am - 10:45am	Seats (Total: 20) CEN 0200
0602	Colleen Terpos TuTh 8:00am - 10:45am	Seats (Total: 20) PHY 4220

0701	Colleen Terpos TuTh 11:00am - 1:45pm	Seats (Total: 20) CEN 0200
0702	Colleen Terpos TuTh 11:00am - 1:45pm	Seats (Total: 20) PHY 4220

MATH007 **Algebra for MATH 107**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A review of Intermediate High School Algebra intended for students preparing for MATH107. It is taught 5 days per week for the first 5 weeks, then leads directly into a special section of MATH107, the same semester, which also meets 5 days per week. Continuation in MATH107 is conditional on the student passing the MATHEMATICS PLACEMENT EXAM at the appropriate level. Topics include linear equations, linear inequalities, operations on polynomials, factoring, solutions of quadratic equations, as well as exponential and logarithm functions. MATH007 does not carry any credit toward any degree at the University, nor is it graded. It leads to either MATH107 or MATH003, both of which are graded.

1201	Debra Franklin MTuWThF 12:00pm - 12:50pm	Seats (Total: 22) MTH B0431

MATH013 **Algebra for MATH 113**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A review of Intermediate High School Algebra intended for students preparing for MATH113. It is taught 5 days per week for the first 5 weeks, then leads directly into a special section of MATH113, the same semester, which also meets 5 days per week. Continuation in MATH113 is conditional on the student passing the MATHEMATICS PLACEMENT EXAM at the appropriate level. Topics include exponents, polynomials, linear equations, quadratic equations, as well as polynomial, rational, exponential, logarithm functions, and trigonometry. MATH013 does not carry any credit toward any degree at the University, nor is it graded. It leads directly to MATH113 (or MATH110), or MATH003, all of which are graded.

1101	Santuria Orsetti MTuWThF 10:00am - 10:50am	Seats (Total: 22) MTH 0402
1201	Susan Mazzullo MTuWThF 12:00pm - 12:50pm	Seats (Total: 22) MTH 0402

MATH015 **Algebra for MATH 115**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A review of Intermediate High School Algebra intended for students preparing for MATH115. It is taught 5 days per week for the first 5 weeks, then leads directly into a special section of MATH115, the same semester, which also meets 5 days per week. Continuation in MATH115 is conditional on the student passing the MATHEMATICS PLACEMENT EXAM at the appropriate level. Topics include exponents, polynomials, linear equations in one and two variables, quadratic equations, as well as polynomial, rational, exponential, logarithm functions and trigonometry. MATH015 does not carry any credit toward any degree at the University, nor is it graded. It leads directly to MATH115 (or MATH111 or MATH113 or MATH110), or MATH003, all of which are graded.

1101	Ben Bezejouh MTuWThF 10:00am - 10:50am	Seats (Total: 22) ATL 1109
1201	Ben Bezejouh MTuWThF 12:00pm - 12:50pm	Seats (Total: 22) ATL 1109

MATH107 Introduction to Math Modeling and Probability

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSMA

Prerequisite: Must have math eligibility of Math 107 or higher; and math eligibility is based on Math Placement Exam or successful completion of MATH003 with appropriate eligibility. Restriction: Not open to students majoring in mathematics, engineering, business, life sciences, and the physical sciences;; and must not have completed MATH120, MATH130, MATH136, or MATH140; and must not have completed MATH220; and must not have completed any MATH or STAT course with a prerequisite of MATH120, MATH130, MATH136, MATH140 or MATH220. Credit only granted for: STAT100, MATH107, MATH110, MATH111, MATH112, or MATH113. Formerly: Math 110 and Math 111. Additional information: Students who have credits for MATH107 may not also receive credits for STAT100, MATH110, MATH 111, MATH112, or MATH113.

A goal is to convey the power of mathematics as shown by a variety of problems which can be modeled and solved by quantitative means. Also included is an introduction to probability. Topics include data analysis, equations, systems of equations, inequalities, elementary linear programming, Venn diagrams, counting, basic probability, permutations, combinations, tree diagrams, standard normal and normal distributions. The mathematics of finance is covered. The course includes problem solving and decision making in economics, management, and social sciences.

0101	Mirna Pinsky MWF 11:00am - 11:50am	Seats (Total: 28) MTH 0302
0201	Mirna Pinsky MWF 12:00pm - 12:50pm	Seats (Total: 28) MTH 0302

0301	Julie Daberkow MWF 1:00pm - 1:50pm	Seats (Total: 23) MTH 0302
0302	Matthew Dellatorre MWF 1:00pm - 1:50pm	Seats (Total: 27) MTH 0411
0401	Matthew Dellatorre MWF 2:00pm - 2:50pm	Seats (Total: 27) MTH 0302

MATH113 **College Algebra and Trigonometry**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSMA

Prerequisite: Must have math eligibility of MATH113 or higher; and math eligibility is based on the Math Placement Exam or the successful completion of MATH 003 with appropriate eligibility. Restriction: Must not have completed MATH115, MATH120, MATH130, MATH136, or MATH140; and must not have completed any course with a prerequisite of MATH120, MATH130, MATH136, MATH140 or MATH220; and must not have completed MATH112 or MATH220. Credit only granted for: Students who have credits for MATH113 may not also receive credits for MATH107, MATH110, MATH112, or MATH115.

Topics include elementary functions including graphs and applications of: polynomial, rational, exponential, and logarithmic functions. Systems of equations and applications. Trigonometric functions: angle and radian measure, graphs and applications.

0101	David Russell MWF 10:00am - 10:50am	Seats (Total: 23) MTH 0105
0102	Haeyun Seo MWF 10:00am - 10:50am	Seats (Total: 23) MTH 0306
0103	Brooke Herzog MWF 10:00am - 10:50am	Seats (Total: 23) MTH B0429
0104	Kevin Dunlap MWF 10:00am - 10:50am	Seats (Total: 23) MTH 0407
0201	David Russell MWF 11:00am - 11:50am	Seats (Total: 23) MTH 0105
0202	Haeyun Seo MWF 11:00am - 11:50am	Seats (Total: 23) MTH 0306

0203	Brooke Herzog MWF 11:00am - 11:50am	Seats (Total: 23) MTH B0429	
0204	Kevin Dunlap MWF 11:00am - 11:50am	Seats (Total: 23) MTH 0407	
0301	Brandon Alexander MWF 1:00pm - 1:50pm	Seats (Total: 25) MTH 0105	
0302	Jing Zhou MWF 1:00pm - 1:50pm	Seats (Total: 25) MTH 0306	
0401	Brandon Alexander MWF 2:00pm - 2:50pm	Seats (Total: 25) MTH 0105	
0402	Jing Zhou MWF 2:00pm - 2:50pm	Seats (Total: 25) MTH 0306	

MATH115 **Precalculus**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSMA

Prerequisite: Must have math eligibility of MATH115 or higher; and math eligibility is based on the Math Placement Exam or the successful completion of MATH003 with appropriate eligibility. Or MATH113. Restriction: Must not have completed MATH140; and must not have completed any MATH or STAT course with a prerequisite of MATH140. Credit only granted for: Students who have credits for MATH115 may not also receive credits for MATH112 or MATH113.

Preparation for MATH120, MATH130 or MATH140. Elementary functions and graphs: polynomials, rational functions, exponential and logarithmic functions, trigonometric functions. Algebraic techniques preparatory for calculus.

Preparation for MATH 220 or MATH 140. All sections will require the use of a TI graphics calculator. Instructor will use a TI-83 or TI-83+ calculator. If purchasing used books additional software may be required.

0111	Raluca Rosca MWF 9:00am - 9:50am MWF 10:00am - 10:50am	Seats (Total: 22) ESJ 2208 PHY 4207	Discussion
0121	Raluca Rosca MWF 9:00am - 9:50am MWF 11:00am - 11:50am	Seats (Total: 22) ESJ 2208 PHY 4207	Discussion

0131	Raluca Rosca MWF 9:00am - 9:50am MWF 12:00pm - 12:50pm	Seats (Total: 18) ESJ 2208 PHY 4207	Discussion
0141	Raluca Rosca MWF 9:00am - 9:50am MWF 1:00pm - 1:50pm	Seats (Total: 15) ESJ 2208 PHY 4207	Discussion
0151	Raluca Rosca MWF 9:00am - 9:50am TuTh 9:30am - 10:45am	Seats (Total: 22) ESJ 2208 PHY 4207	Discussion
0161	Raluca Rosca MWF 9:00am - 9:50am TuTh 11:00am - 12:15pm	Seats (Total: 22) ESJ 2208 PHY 4207	Discussion
0171	Raluca Rosca MWF 9:00am - 9:50am TuTh 12:30pm - 1:45pm	Seats (Total: 20) ESJ 2208 PHY 4207	Discussion
0181	Raluca Rosca MWF 9:00am - 9:50am TuTh 2:00pm - 3:15pm	Seats (Total: 20) ESJ 2208 PHY 4207	Discussion

MATH120 **Elementary Calculus I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSAR, FSMA

Prerequisite: 1 course with a minimum grade of C- from (MATH112, MATH113, MATH115). Or must have math eligibility of MATH120 or higher; and math eligibility is based on the Math Placement Test. Restriction: Not open to students majoring in mathematics, engineering, the biological sciences, biochemistry, chemistry, or the physical sciences. Credit only granted for: MATH120, MATH130, MATH136, MATH140, or MATH220. Formerly: MATH220.

Basic ideas of differential and integral calculus, with emphasis on elementary techniques of differentiation and applications.

0111	Samuel Bloom MWF 11:00am - 11:50am Tu 8:00am - 8:50am	Seats (Total: 28) BRB 1101 MTH 0104	Discussion

0112	Samuel Bloom MWF 11:00am - 11:50am Tu 8:00am - 8:50am	Seats (Total: 28) BRB 1101 MTH 0201	Discussion
0121	Samuel Bloom MWF 11:00am - 11:50am Tu 9:00am - 9:50am	Seats (Total: 28) BRB 1101 MTH 0104	Discussion
0122	Samuel Bloom MWF 11:00am - 11:50am Tu 9:00am - 9:50am	Seats (Total: 28) BRB 1101 MTH 0201	Discussion
0131	Samuel Bloom MWF 11:00am - 11:50am Tu 10:00am - 10:50am	Seats (Total: 28) BRB 1101 MTH 0104	Discussion
0132	Samuel Bloom MWF 11:00am - 11:50am Tu 10:00am - 10:50am	Seats (Total: 28) BRB 1101 MTH 0201	Discussion
0141	Samuel Bloom MWF 11:00am - 11:50am Tu 11:00am - 11:50am	Seats (Total: 28) BRB 1101 MTH 0104	Discussion
0142	Samuel Bloom MWF 11:00am - 11:50am Tu 11:00am - 11:50am	Seats (Total: 28) BRB 1101 MTH 0201	Discussion
0211	Thibaut Castan MWF 1:00pm - 1:50pm Th 8:00am - 8:50am	Seats (Total: 27) ARM 0135 MTH 0104	Discussion
0212	Thibaut Castan MWF 1:00pm - 1:50pm Th 8:00am - 8:50am	Seats (Total: 28) ARM 0135 MTH 0201	Discussion
0221	Thibaut Castan MWF 1:00pm - 1:50pm Th 9:00am - 9:50am	Seats (Total: 27) ARM 0135 MTH 0104	Discussion

0222	Thibaut Castan MWF 1:00pm - 1:50pm Th 9:00am - 9:50am	Seats (Total: 28) ARM 0135 MTH 0201	Discussion
0231	Thibaut Castan MWF 1:00pm - 1:50pm Th 10:00am - 10:50am	Seats (Total: 27) ARM 0135 MTH 0104	Discussion
0232	Thibaut Castan MWF 1:00pm - 1:50pm Th 10:00am - 10:50am	Seats (Total: 28) ARM 0135 MTH 0201	Discussion
0241	Thibaut Castan MWF 1:00pm - 1:50pm Th 11:00am - 11:50am	Seats (Total: 27) ARM 0135 MTH 0104	Discussion
0242	Thibaut Castan MWF 1:00pm - 1:50pm Th 11:00am - 11:50am	Seats (Total: 28) ARM 0135 MTH 0201	Discussion
0311	Sarah Yeakel TuTh 9:30am - 10:45am M 8:00am - 8:50am	Seats (Total: 23) ARM 0135 MTH 0409	Discussion
0312	Sarah Yeakel TuTh 9:30am - 10:45am M 8:00am - 8:50am	Seats (Total: 23) ARM 0135 MTH 0201	Discussion
0321	Sarah Yeakel TuTh 9:30am - 10:45am M 9:00am - 9:50am	Seats (Total: 23) ARM 0135 MTH 0409	Discussion
0322	Sarah Yeakel TuTh 9:30am - 10:45am M 9:00am - 9:50am	Seats (Total: 23) ARM 0135 MTH 0201	Discussion
0331	Sarah Yeakel TuTh 9:30am - 10:45am M 10:00am - 10:50am	Seats (Total: 23) ARM 0135 MTH 0409	Discussion

0332	Sarah Yeakel TuTh 9:30am - 10:45am M 10:00am - 10:50am	Seats (Total: 23) ARM 0135 MTH 0201	Discussion
0341	Sarah Yeakel TuTh 9:30am - 10:45am M 11:00am - 11:50am	Seats (Total: 23) ARM 0135 MTH 0409	Discussion
0342	Sarah Yeakel TuTh 9:30am - 10:45am M 11:00am - 11:50am	Seats (Total: 23) ARM 0135 MTH 0201	Discussion
0411	Timothy Pilachowski TuTh 12:30pm - 1:45pm W 8:00am - 8:50am	Seats (Total: 28) SKN 0200 MTH 0409	Discussion
0412	Timothy Pilachowski TuTh 12:30pm - 1:45pm W 8:00am - 8:50am	Seats (Total: 28) SKN 0200 MTH 0201	Discussion
0421	Timothy Pilachowski TuTh 12:30pm - 1:45pm W 9:00am - 9:50am	Seats (Total: 28) SKN 0200 MTH 0409	Discussion
0422	Timothy Pilachowski TuTh 12:30pm - 1:45pm W 9:00am - 9:50am	Seats (Total: 28) SKN 0200 MTH 0201	Discussion
0431	Timothy Pilachowski TuTh 12:30pm - 1:45pm W 10:00am - 10:50am	Seats (Total: 28) SKN 0200 MTH 0409	Discussion
0432	Timothy Pilachowski TuTh 12:30pm - 1:45pm W 10:00am - 10:50am	Seats (Total: 28) SKN 0200 MTH 0201	Discussion
0441	Timothy Pilachowski TuTh 12:30pm - 1:45pm W 11:00am - 11:50am	Seats (Total: 28) SKN 0200 MTH 0409	Discussion

0442	Timothy Pilachowski TuTh 12:30pm - 1:45pm W 11:00am - 11:50am	Seats (Total: 28) SKN 0200 MTH 0201	 Discussion

MATH121 **Elementary Calculus II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH120, MATH130, MATH136, or MATH140; or must have completed MATH220. Restriction: Not open to students majoring in mathematics, engineering, the biological sciences, biochemistry, chemistry, or the physical sciences. Credit only granted for: MATH121, MATH131, MATH141, or MATH221. Formerly: MATH 221.

Differential and integral calculus, with emphasis on elementary techniques of integration and applications.

0101	Maxx Cho MWF 12:00pm - 12:50pm	Seats (Total: 25) MTH 1313	
0201	Maxx Cho MWF 1:00pm - 1:50pm	Seats (Total: 25) MTH 1313	

MATH135 **Discrete Mathematics for Life Sciences**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR, FSMA

Prerequisite: Minimum grade of C- in MATH115; or must have math eligibility of MATH140 or higher; and math eligibility is based on the Math Placement Test. Restriction: Must be in a major in CMNS-Biological Sciences UG Program; and not open to students majoring in mathematics, engineering, or the physical sciences.

Basic discrete mathematics, with emphasis on relevant models and techniques to the life sciences.

0111	Tobias von Petersdorff TuTh 9:30am - 10:45am MW 8:00am - 8:50am	Seats (Total: 27) ARM 0126 MTH 0101	 Discussion
0121	Tobias von Petersdorff TuTh 9:30am - 10:45am MW 9:00am - 9:50am	Seats (Total: 27) ARM 0126 MTH 0101	 Discussion

0122	Tobias von Petersdorff TuTh 9:30am - 10:45am MW 9:00am - 9:50am	Seats (Total: 20) ARM 0126 MTH 0102	Discussion
0131	Tobias von Petersdorff TuTh 9:30am - 10:45am MW 10:00am - 10:50am	Seats (Total: 27) ARM 0126 MTH 0101	Discussion
0132	Tobias von Petersdorff TuTh 9:30am - 10:45am MW 10:00am - 10:50am	Seats (Total: 20) ARM 0126 MTH 0102	Discussion
0141	Tobias von Petersdorff TuTh 9:30am - 10:45am MW 11:00am - 11:50am	Seats (Total: 27) ARM 0126 MTH 0101	Discussion

MATH136 **Calculus for Life Sciences**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH135. Restriction: Must be in a major in CMNS-Biological Sciences UG Program. Credit only granted for: MATH120, MATH130, MATH136, or MATH140.

Continuation of MATH135, including basic ideas of differential integral calculus, with emphasis on elementary techniques and applications to the life sciences.

0121	Changguang Dong TuTh 9:30am - 10:45am MF 9:00am - 9:50am	Seats (Total: 25) ARM 0131 MTH 0303	Discussion
0131	Changguang Dong TuTh 9:30am - 10:45am MF 11:00am - 11:50am	Seats (Total: 25) ARM 0131 MTH 0307	Discussion
0141	Changguang Dong TuTh 9:30am - 10:45am MF 12:00pm - 12:50pm	Seats (Total: 25) ARM 0131 MTH 0307	Discussion
0221	Ruiwen Shu TuTh 11:00am - 12:15pm WF 9:00am - 9:50am	Seats (Total: 25) ARM 0135 MTH B0423	Discussion

0231	Ruiwen Shu TuTh 11:00am - 12:15pm WF 11:00am - 11:50am	Seats (Total: 25) ARM 0135 MTH B0423	Discussion
0241	Ruiwen Shu TuTh 11:00am - 12:15pm WF 12:00pm - 12:50pm	Seats (Total: 25) ARM 0135 MTH B0423	Discussion

MATH140 **Calculus I**

Credits: 4	Grading Method: Regular, Pass-Fail, Audit	CORE: MS	General Education: FSAR, FSMA

Prerequisite: Minimum grade of C- in MATH115. Or must have math eligibility of MATH140 or higher; and math eligibility is based on the Math Placement Test. Credit only granted for: MATH120, MATH130, MATH136, MATH140 or MATH220.

Introduction to calculus, including functions, limits, continuity, derivatives and applications of the derivative, sketching of graphs of functions, definite and indefinite integrals, and calculation of area. The course is especially recommended for science, engineering and mathematics majors.

All sections will require the use of a TI graphics calculator. Instructor will use a TI-83, TI-83+, or TI-86 calculator. If purchasing used books additional software may be required.

0111	Amin Gholampour MWF 11:00am - 11:50am TuTh 8:00am - 8:50am	Seats (Total: 24) ESJ 0224 MTH 0407	Discussion
0112	Amin Gholampour MWF 11:00am - 11:50am TuTh 8:00am - 8:50am	Seats (Total: 24) ESJ 0224 MTH 0401	Discussion
0113	Amin Gholampour MWF 11:00am - 11:50am TuTh 8:00am - 8:50am	Seats (Total: 24) ESJ 0224 MTH 0405	Discussion
0121	Amin Gholampour MWF 11:00am - 11:50am TuTh 9:00am - 9:50am	Seats (Total: 25) ESJ 0224 MTH 0407	Discussion
0122	Amin Gholampour MWF 11:00am - 11:50am TuTh 9:00am - 9:50am	Seats (Total: 25) ESJ 0224 MTH 0401	Discussion

0123	Amin Gholampour MWF 11:00am - 11:50am TuTh 9:00am - 9:50am	Seats (Total: 25) ESJ 0224 MTH 0405	Discussion
0131	Amin Gholampour MWF 11:00am - 11:50am TuTh 10:00am - 10:50am	Seats (Total: 25) ESJ 0224 MTH 0401	Discussion
0132	Amin Gholampour MWF 11:00am - 11:50am TuTh 10:00am - 10:50am	Seats (Total: 25) ESJ 0224 MTH 0405	Discussion
0141	Amin Gholampour MWF 11:00am - 11:50am TuTh 11:00am - 11:50am	Seats (Total: 22) ESJ 0224 MTH 0401	Discussion
0142	Amin Gholampour MWF 11:00am - 11:50am TuTh 11:00am - 11:50am	Seats (Total: 22) ESJ 0224 MTH 0405	Discussion
0211	Archana Khurana MWF 2:00pm - 2:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 20) ESJ 2208 MTH B0425	Discussion
0212	Archana Khurana MWF 2:00pm - 2:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 20) ESJ 2208 MTH 0307	Discussion
0221	Archana Khurana MWF 2:00pm - 2:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 19) ESJ 2208 MTH B0425	Discussion
0222	Archana Khurana MWF 2:00pm - 2:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 20) ESJ 2208 MTH 0307	Discussion
0231	Archana Khurana MWF 2:00pm - 2:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 21) ESJ 2208 MTH B0425	Discussion

0232	Archana Khurana MWF 2:00pm - 2:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 20) ESJ 2208 MTH 0307	Discussion
0241	Archana Khurana MWF 2:00pm - 2:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 19) ESJ 2208 MTH B0425	Discussion
0242	Archana Khurana MWF 2:00pm - 2:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 19) ESJ 2208 MTH 0307	Discussion
0311	Timothy Pilachowski, Guangyu Xi MWF 11:00am - 11:50am TuTh 9:00am - 9:50am	Seats (Total: 25) KEB 1110 CSI 2118	Discussion
0312	Guangyu Xi, Timothy Pilachowski MWF 11:00am - 11:50am TuTh 11:00am - 11:50am	Seats (Total: 25) KEB 1110 BPS 1234	Discussion
0321	Guangyu Xi, Timothy Pilachowski MWF 11:00am - 11:50am TuTh 10:00am - 10:50am	Seats (Total: 25) KEB 1110 CSI 2118	Discussion

MATH141 **Calculus II**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: MS

Prerequisite: Minimum grade of C- in MATH140. Or 1 course with a minimum grade of B- from (MATH130, MATH136); and permission of CMNS-Mathematics department. Credit only granted for: MATH121, MATH131, MATH141, or MATH221.

Continuation of MATH140, including techniques of integration, improper integrals, applications of integration (such as volumes, work, arc length, moments), inverse functions, exponential and logarithmic functions, sequences and series.

All sections will require the use of a TI graphics calculator. Instructor will use a TI-83, TI-83+, or TI-86 calculator. Emphasis on student interaction in groups, including team approach to solving calculus based problems. In addition to the lectures, there will be 2 eighty-minute workshops each week with enhanced assistance and support for students. If purchasing used books additional software may be required.

0111	Denny Gulick MWF 8:00am - 8:50am TuTh 8:00am - 9:20am	Seats (Total: 25) PHY 1412 MTH 0102	Discussion
0112	Denny Gulick MWF 8:00am - 8:50am TuTh 8:00am - 9:20am	Seats (Total: 25) PHY 1412 MTH 0303	Discussion
0113	Denny Gulick MWF 8:00am - 8:50am TuTh 8:00am - 9:20am	Seats (Total: 25) PHY 1412 MTH 0302	Discussion
0121	Denny Gulick MWF 8:00am - 8:50am TuTh 9:30am - 10:50am	Seats (Total: 25) PHY 1412 MTH 0102	Discussion
0122	Denny Gulick MWF 8:00am - 8:50am TuTh 9:30am - 10:50am	Seats (Total: 25) PHY 1412 MTH 0303	Discussion
0123	Denny Gulick MWF 8:00am - 8:50am TuTh 9:30am - 10:50am	Seats (Total: 25) PHY 1412 MTH 0302	Discussion
0131	Denny Gulick MWF 8:00am - 8:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) PHY 1412 MTH 0102	Discussion
0132	Denny Gulick MWF 8:00am - 8:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) PHY 1412 MTH 0302	Discussion
0211	Timothy Pilachowski MWF 9:00am - 9:50am TuTh 8:00am - 9:20am	Seats (Total: 25) ESJ 0224 ESJ 2212	Discussion
0212	Timothy Pilachowski MWF 9:00am - 9:50am TuTh 8:00am - 9:20am	Seats (Total: 25) ESJ 0224 ESJ 2212	Discussion

0221	Timothy Pilachowski MWF 9:00am - 9:50am TuTh 9:30am - 10:50am	Seats (Total: 25) ESJ 0224 ESJ 2212	 Discussion
0222	Timothy Pilachowski MWF 9:00am - 9:50am TuTh 9:30am - 10:50am	Seats (Total: 25) ESJ 0224 ESJ 2212	 Discussion
0224	Timothy Pilachowski MWF 9:00am - 9:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) ESJ 0224 ESJ 2212	 Discussion
0231	Timothy Pilachowski MWF 9:00am - 9:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) ESJ 0224 ESJ 2212	 Discussion
0311	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 11:00am - 12:20pm	Seats (Total: 25) ARM 0131 MTH 0105	 Discussion
0312	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 11:00am - 12:20pm	Seats (Total: 25) ARM 0131 MTH B0429	 Discussion
0313	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 11:00am - 12:20pm	Seats (Total: 25) ARM 0131 MTH 0305	 Discussion
0321	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 12:30pm - 1:50pm	Seats (Total: 25) ARM 0131 MTH 0105	 Discussion
0322	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 12:30pm - 1:50pm	Seats (Total: 25) ARM 0131 MTH B0429	 Discussion
0323	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 12:30pm - 1:50pm	Seats (Total: 25) ARM 0131 MTH 0305	 Discussion

0331	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 2:00pm - 3:20pm	Seats (Total: 25) ARM 0131 MTH 0105	Discussion
0332	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 2:00pm - 3:20pm	Seats (Total: 25) ARM 0131 MTH B0429	Discussion
0411	Adam Telatovich MWF 2:00pm - 2:50pm TuTh 11:00am - 12:20pm	Seats (Total: 24) MMH 1400 MTH 0407	Discussion
0412	Adam Telatovich MWF 2:00pm - 2:50pm TuTh 11:00am - 12:20pm	Seats (Total: 25) MMH 1400 MTH 1313	Discussion
0413	Adam Telatovich MWF 2:00pm - 2:50pm TuTh 11:00am - 12:20pm	Seats (Total: 25) MMH 1400 MTH 0409	Discussion
0421	Adam Telatovich MWF 2:00pm - 2:50pm TuTh 12:30pm - 1:50pm	Seats (Total: 25) MMH 1400 MTH 0407	Discussion
0422	Adam Telatovich MWF 2:00pm - 2:50pm TuTh 12:30pm - 1:50pm	Seats (Total: 25) MMH 1400 MTH 1313	Discussion
0423	Adam Telatovich MWF 2:00pm - 2:50pm TuTh 12:30pm - 1:50pm	Seats (Total: 25) MMH 1400 MTH 0409	Discussion
0431	Adam Telatovich MWF 2:00pm - 2:50pm TuTh 2:00pm - 3:20pm	Seats (Total: 25) MMH 1400 MTH 0407	Discussion
0432	Adam Telatovich MWF 2:00pm - 2:50pm TuTh 2:00pm - 3:20pm	Seats (Total: 19) MMH 1400 MTH 0409	Discussion

0511	Nathaniael Manning MWF 3:00pm - 3:50pm TuTh 12:30pm - 1:50pm	Seats (Total: 25) ARM 0131 MTH B0423	Discussion
0512	Nathaniael Manning MWF 3:00pm - 3:50pm TuTh 12:30pm - 1:50pm	Seats (Total: 25) ARM 0131 MTH 0302	Discussion
0513	Nathaniael Manning MWF 3:00pm - 3:50pm TuTh 12:30pm - 1:50pm	Seats (Total: 25) ARM 0131 MTH 0401	Discussion
0521	Nathaniael Manning MWF 3:00pm - 3:50pm TuTh 2:00pm - 3:20pm	Seats (Total: 25) ARM 0131 MTH B0423	Discussion
0522	Nathaniael Manning MWF 3:00pm - 3:50pm TuTh 2:00pm - 3:20pm	Seats (Total: 25) ARM 0131 MTH 0302	Discussion
0523	Nathaniael Manning MWF 3:00pm - 3:50pm TuTh 2:00pm - 3:20pm	Seats (Total: 25) ARM 0131 MTH 0401	Discussion
0524	Nathaniael Manning MWF 3:00pm - 3:50pm TuTh 2:00pm - 3:20pm	Seats (Total: 20) ARM 0131 MTH 0411	Discussion
0531	Nathaniael Manning MWF 3:00pm - 3:50pm TuTh 3:30pm - 4:50pm	Seats (Total: 25) ARM 0131 MTH B0423	Discussion

MATH141H **Calculus II**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: MS

Prerequisite: Minimum grade of C- in MATH140. Or 1 course with a minimum grade of B- from (MATH130, MATH136); and permission of CMNS-Mathematics department. Credit only granted for: MATH121, MATH131, MATH141, or MATH221.

Continuation of MATH140, including techniques of integration, improper integrals, applications of integration (such as volumes, work, arc length, moments), inverse functions, exponential and logarithmic functions, sequences and series.

For general honors students only. TI graphics calculator required. Instructor will use TI-83, TI-83+ or TI-86 calculator.

0101	Steven Chadwick W 11:00am - 12:50pm MF 11:00am - 11:50am	Seats (Total: 26) MTH 0403 MTH 0403
0201	Xiumin Du M 12:00pm - 1:50pm WF 12:00pm - 12:50pm	Seats (Total: 25) MTH B0427 MTH B0427

MATH199A **Special Topics in Mathematics**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Many games have a mathematical component. We will introduce several games, play them, and investigate the underlying mathematics. Students will work in teams on projects that involve developing strategies for new games.

1901	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)

MATH206 **Introduction to Matlab**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH136, MATH140). Credit only granted for: CMSC206, CMSC298M, MATH206, or MATH299M.

This course is intended to prepare students for subsequent courses requiring computation with MATLAB. Covers basics of MATLAB including simple commands, variables, solving equations, graphing differentiation and integration, matrices and vectors, functions, M-files and fundamentals of programming in the MATLAB environment. When offered in Winter and Summer terms, the course is offered in a format suitable for online distance learning.

0101	Justin Wyss-Gallifent **Meets January 28, 2019 - March 3, 2019** Class time/details on ELMs	Seats (Total: 525) ONLINE

MATH212 **Elements of Numbers and Operations**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Must have completed one year of college preparatory algebra. Restriction: Must be in one of the following programs (Early Childhood Education; Special Education; Elementary Education). Credit only granted for: MATH212 or MATH210.

Reviews and extends topics of arithmetic and number theory related to the elementary school curriculum, particularly number systems and operations with natural numbers, integers, and rationals.

0201	Diana Bowen MWF 12:00pm - 12:50pm	Seats (Total: 22) MTH 0401
0301	Diana Bowen MWF 1:00pm - 1:50pm	Seats (Total: 22) MTH 0401

MATH213 **Elements of Geometry and Measurement**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: MATH212. Restriction: Must be in one of the following programs (Early Childhood Education; Special Education; Elementary Education). Credit only granted for: MATH211 or MATH213.

Properties of geometric objects in two and three dimensions; parallel lines, curves and polygons; ratio, proportion, similarity; transformational geometry and measurement, constructions, justifications and proofs.

0201	Sean Gruber MWF 11:00am - 11:50am	Seats (Total: 22) EDU 2119
0301	Tarik Buli MWF 12:00pm - 12:50pm	Seats (Total: 22) JMZ 2123

MATH214 **Elements of Probability and Statistics**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: MATH212. Restriction: Must be in one of the following programs (Early Childhood Education; Special Education; Elementary Education). Credit only granted for: MATH211 or MATH214.

Permutations and combinations; probability; collecting and representing data; using statistics to analyze and interpret data.

0101	Jonathan Fernandes MWF 8:00am - 8:50am	Seats (Total: 22) MTH 1313	
0201	William Viviani MWF 9:00am - 9:50am	Seats (Total: 22) CHM 1228	

MATH240 **Introduction to Linear Algebra**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH131, MATH141). Credit only granted for: MATH240, MATH341, or MATH461.

Basic concepts of linear algebra: vector spaces, applications to line and plane geometry, linear equations and matrices, similar matrices, linear transformations, eigenvalues, determinants and quadratic forms.

0111	Allan Yashinski MWF 1:00pm - 1:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 28) ARM 0126 MTH 0101	Discussion
0112	Allan Yashinski MWF 1:00pm - 1:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 28) ARM 0126 MTH B0427	Discussion
0113	Allan Yashinski MWF 1:00pm - 1:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 28) ARM 0126 MTH 0201	Discussion
0121	Allan Yashinski MWF 1:00pm - 1:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 28) ARM 0126 MTH 0402	Discussion
0122	Allan Yashinski MWF 1:00pm - 1:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 28) ARM 0126 MTH B0427	Discussion
0123	Allan Yashinski MWF 1:00pm - 1:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 28) ARM 0126 MTH 0201	Discussion

0131	Allan Yashinski MWF 1:00pm - 1:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 28) ARM 0126 MTH 0304	 Discussion
0132	Allan Yashinski MWF 1:00pm - 1:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 28) ARM 0126 MTH 0405	 Discussion
0141	Allan Yashinski MWF 1:00pm - 1:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 28) ARM 0126 MTH B0427	 Discussion
0142	Allan Yashinski MWF 1:00pm - 1:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 28) ARM 0126 MTH 0101	 Discussion
0211	Terence Long MWF 12:00pm - 12:50pm W 1:00pm - 1:50pm	Seats (Total: 45) ITV 1100 ITV 1100	
0311	Samuel Bloom MWF 1:00pm - 1:50pm TuTh 8:00am - 8:50am	Seats (Total: 25) HJP 0226 EGR 2116	 Discussion
0312	Samuel Bloom MWF 1:00pm - 1:50pm TuTh 9:00am - 9:50am	Seats (Total: 25) HJP 0226 EGR 2116	 Discussion
0313	Samuel Bloom MWF 1:00pm - 1:50pm TuTh 10:00am - 10:50am	Seats (Total: 25) HJP 0226 EGR 2116	 Discussion
0314	Samuel Bloom MWF 1:00pm - 1:50pm TuTh 11:00am - 11:50am	Seats (Total: 25) HJP 0226 MTH 0402	 Discussion
0315	Samuel Bloom MWF 1:00pm - 1:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 25) HJP 0226 BPS 1228	 Discussion

0316	Samuel Bloom MWF 1:00pm - 1:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 25) HJP 0226 BPS 1228	 Discussion

MATH241 **Calculus III**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141. Credit only granted for: MATH241 or MATH340.

Introduction to multivariable calculus, including vectors and vector-valued functions, partial derivatives and applications of partial derivatives (such as tangent planes and Lagrange multipliers), multiple integrals, volume, surface area, and the classical theorems of Green, Stokes and Gauss.

All sections will use MATLAB.

0111	Terence Long MWF 9:00am - 9:50am TuTh 8:00am - 8:50am	Seats (Total: 28) BRB 1101 MTH B0425	 Discussion
0112	Terence Long MWF 9:00am - 9:50am TuTh 8:00am - 8:50am	Seats (Total: 28) BRB 1101 MTH B0427	 Discussion
0121	Terence Long MWF 9:00am - 9:50am TuTh 9:30am - 10:20am	Seats (Total: 28) BRB 1101 MTH B0425	 Discussion
0122	Terence Long MWF 9:00am - 9:50am TuTh 9:30am - 10:20am	Seats (Total: 28) BRB 1101 MTH B0427	 Discussion
0131	Terence Long MWF 9:00am - 9:50am TuTh 12:30pm - 1:20pm	Seats (Total: 28) BRB 1101 MTH 0405	 Discussion
0132	Terence Long MWF 9:00am - 9:50am TuTh 12:30pm - 1:20pm	Seats (Total: 28) BRB 1101 ITV 1100	 Discussion

0141	Terence Long MWF 9:00am - 9:50am TuTh 2:00pm - 2:50pm	Seats (Total: 28) BRB 1101 MTH 0103	 Discussion
0142	Terence Long MWF 9:00am - 9:50am TuTh 2:00pm - 2:50pm	Seats (Total: 28) BRB 1101 ITV 1100	 Discussion
0211	Casey Cremins MWF 10:00am - 10:50am TuTh 8:00am - 8:50am	Seats (Total: 28) ARM 0131 MTH B0429	 Discussion
0212	Casey Cremins MWF 10:00am - 10:50am TuTh 8:00am - 8:50am	Seats (Total: 28) ARM 0131 MTH 0411	 Discussion
0221	Casey Cremins MWF 10:00am - 10:50am TuTh 9:30am - 10:20am	Seats (Total: 28) ARM 0131 MTH B0429	 Discussion
0222	Casey Cremins MWF 10:00am - 10:50am TuTh 9:30am - 10:20am	Seats (Total: 28) ARM 0131 MTH 0411	 Discussion
0231	Casey Cremins MWF 10:00am - 10:50am TuTh 12:30pm - 1:20pm	Seats (Total: 28) ARM 0131 MTH 0303	 Discussion
0232	Casey Cremins MWF 10:00am - 10:50am TuTh 12:30pm - 1:20pm	Seats (Total: 28) ARM 0131 MTH 0403	 Discussion
0241	Casey Cremins MWF 10:00am - 10:50am TuTh 2:00pm - 2:50pm	Seats (Total: 28) ARM 0131 MTH 0303	 Discussion
0242	Casey Cremins MWF 10:00am - 10:50am TuTh 2:00pm - 2:50pm	Seats (Total: 28) ARM 0131 MTH 0403	 Discussion

0311	Justin Wyss-Gallifent MWF 12:00pm - 12:50pm TuTh 8:00am - 8:50am	Seats (Total: 28) ARM 0126 MTH 0103	Discussion
0312	Justin Wyss-Gallifent MWF 12:00pm - 12:50pm TuTh 8:00am - 8:50am	Seats (Total: 28) ARM 0126 MTH 0306	Discussion
0321	Justin Wyss-Gallifent MWF 12:00pm - 12:50pm TuTh 9:30am - 10:20am	Seats (Total: 28) ARM 0126 MTH 0103	Discussion
0322	Justin Wyss-Gallifent MWF 12:00pm - 12:50pm TuTh 9:30am - 10:20am	Seats (Total: 28) ARM 0126 MTH 0306	Discussion
0331	Justin Wyss-Gallifent MWF 12:00pm - 12:50pm TuTh 11:00am - 11:50am	Seats (Total: 28) ARM 0126 MTH 0103	Discussion
0332	Justin Wyss-Gallifent MWF 12:00pm - 12:50pm TuTh 11:00am - 11:50am	Seats (Total: 28) ARM 0126 MTH 0306	Discussion
0341	Justin Wyss-Gallifent MWF 12:00pm - 12:50pm TuTh 12:30pm - 1:20pm	Seats (Total: 28) ARM 0126 MTH 0103	Discussion
0342	Justin Wyss-Gallifent MWF 12:00pm - 12:50pm TuTh 12:30pm - 1:20pm	Seats (Total: 28) ARM 0126 MTH 0306	Discussion

MATH241H **Calculus III**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141. Credit only granted for: MATH241 or MATH340.

Introduction to multivariable calculus, including vectors and vector-valued functions, partial derivatives and applications of partial derivatives (such as tangent planes and Lagrange multipliers), multiple integrals, volume, surface area, and the classical theorems of Green, Stokes and Gauss.

For general honors students only. MATH 241H will use MATLAB.

0101	Wiseley Wong MWF 10:00am - 10:50am W 11:00am - 11:50am	Seats (Total: 25) MTH 0307 MTH 0307	
0201	Terence Long, Guangyu Xi MWF 2:00pm - 2:50pm M 3:00pm - 3:50pm	Seats (Total: 25) MTH 0403 MTH 0403	

MATH246 **Differential Equations for Scientists and Engineers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141. Credit only granted for: MATH246 or MATH341.

An introduction to the basic methods of solving ordinary differential equations. Equations of first and second order, linear differential equations, Laplace transforms, numerical methods and the qualitative theory of differential equations.

All sections will use MATLAB.

0111	Adam Telatovich MWF 10:00am - 10:50am Tu 8:00am - 8:50am	Seats (Total: 27) ARM 0126 ATL 1109	 Discussion
0112	Adam Telatovich MWF 10:00am - 10:50am Tu 8:00am - 8:50am	Seats (Total: 27) ARM 0126 MTH 0105	 Discussion
0113	Adam Telatovich MWF 10:00am - 10:50am Tu 8:00am - 8:50am	Seats (Total: 27) ARM 0126 MTH 0305	 Discussion
0121	Adam Telatovich MWF 10:00am - 10:50am Tu 9:00am - 9:50am	Seats (Total: 27) ARM 0126 ATL 1109	 Discussion
0122	Adam Telatovich MWF 10:00am - 10:50am Tu 9:00am - 9:50am	Seats (Total: 27) ARM 0126 MTH 0105	 Discussion

0123	Adam Telatovich MWF 10:00am - 10:50am Tu 9:00am - 9:50am	Seats (Total: 27) ARM 0126 MTH 0305	Discussion
0131	Adam Telatovich MWF 10:00am - 10:50am Tu 10:00am - 10:50am	Seats (Total: 27) ARM 0126 MTH 0105	Discussion
0132	Adam Telatovich MWF 10:00am - 10:50am Tu 10:00am - 10:50am	Seats (Total: 27) ARM 0126 MTH 0305	Discussion
0141	Adam Telatovich MWF 10:00am - 10:50am Tu 11:00am - 11:50am	Seats (Total: 27) ARM 0126 MTH 0307	Discussion
0142	Adam Telatovich MWF 10:00am - 10:50am Tu 11:00am - 11:50am	Seats (Total: 27) ARM 0126 MTH 0101	Discussion
0211	David Hamilton MWF 3:00pm - 3:50pm Th 8:00am - 8:50am	Seats (Total: 23) MMH 1400 ATL 1109	Discussion
0212	David Hamilton MWF 3:00pm - 3:50pm Th 8:00am - 8:50am	Seats (Total: 24) MMH 1400 MTH 0105	Discussion
0221	David Hamilton MWF 3:00pm - 3:50pm Th 9:00am - 9:50am	Seats (Total: 24) MMH 1400 ATL 1109	Discussion
0222	David Hamilton MWF 3:00pm - 3:50pm Th 9:00am - 9:50am	Seats (Total: 24) MMH 1400 MTH 0105	Discussion
0231	David Hamilton MWF 3:00pm - 3:50pm Th 10:00am - 10:50am	Seats (Total: 24) MMH 1400 MTH 0307	Discussion

0232	David Hamilton MWF 3:00pm - 3:50pm Th 10:00am - 10:50am	Seats (Total: 24) MMH 1400 MTH 0305	Discussion
0241	David Hamilton MWF 3:00pm - 3:50pm Th 11:00am - 11:50am	Seats (Total: 24) MMH 1400 MTH 0307	Discussion
0242	David Hamilton MWF 3:00pm - 3:50pm Th 11:00am - 11:50am	Seats (Total: 24) MMH 1400 MTH B0425	Discussion
0311	Fei Wang TuTh 11:00am - 12:15pm W 8:00am - 8:50am	Seats (Total: 27) ARM 0126 MTH 0305	Discussion
0312	Fei Wang TuTh 11:00am - 12:15pm W 8:00am - 8:50am	Seats (Total: 27) ARM 0126 MTH 0303	Discussion
0313	Fei Wang TuTh 11:00am - 12:15pm W 8:00am - 8:50am	Seats (Total: 27) ARM 0126 MTH 0306	Discussion
0321	Fei Wang TuTh 11:00am - 12:15pm W 9:00am - 9:50am	Seats (Total: 27) ARM 0126 MTH 0305	Discussion
0322	Fei Wang TuTh 11:00am - 12:15pm W 9:00am - 9:50am	Seats (Total: 27) ARM 0126 MTH 0303	Discussion
0323	Fei Wang TuTh 11:00am - 12:15pm W 9:00am - 9:50am	Seats (Total: 27) ARM 0126 MTH 0306	Discussion
0331	Fei Wang TuTh 11:00am - 12:15pm W 10:00am - 10:50am	Seats (Total: 27) ARM 0126 MTH 0403	Discussion

0332	Fei Wang TuTh 11:00am - 12:15pm W 10:00am - 10:50am	Seats (Total: 27) ARM 0126 MTH 0103	Discussion
0341	Fei Wang TuTh 11:00am - 12:15pm W 11:00am - 11:50am	Seats (Total: 27) ARM 0126 MTH 0305	Discussion
0342	Fei Wang TuTh 11:00am - 12:15pm W 11:00am - 11:50am	Seats (Total: 27) ARM 0126 MTH 0303	Discussion

MATH246H **Differential Equations for Scientists and Engineers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141. Credit only granted for: MATH246 or MATH341.

An introduction to the basic methods of solving ordinary differential equations. Equations of first and second order, linear differential equations, Laplace transforms, numerical methods and the qualitative theory of differential equations.

For general honors students only. MATH 246H will use MATLAB.

0101	Christian Zickert MWF 2:00pm - 2:50pm	Seats (Total: 30) MTH B0421	
0201	Javier Morales Delgado TuTh 12:30pm - 1:45pm	Seats (Total: 25) MTH B0421	
0301	Sarah Yeakel TuTh 12:30pm - 1:45pm	Seats (Total: 25) MTH 0411	

MATH299C **Selected Topics in Mathematics; STIC: Mathematics & Classical Music**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

0101	Niranjan Ramachandran W 11:00am - 11:50am	Seats (Total: 24) MTH 0106	

MATH299M **Selected Topics in Mathematics; STIC: Visualization Through Mathematica**

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

Prerequisites: MATH140 and MATH141 (or equivalent). A comprehensive course on the technical computing language Mathematica, starting with basics including plotting, computation, 3D modeling, and interactive output. The last weeks focus on advanced topics including parallelization, evaluation control, precomputation, and advanced dynamic functionality. The course culminates in personalized final projects on a topic of each student's choice - application vary from physics to finance to nueroscience and more.

0101	William Goldman	Seats (Total: 35)
	F 4:00pm - 4:50pm	EGR 1104

MATH299N **Selected Topics in Mathematics; STIC: The Mathematics of Ramanujan**

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

0101	Lawrence Washington	Seats (Total: 20)
	F 2:00pm - 2:50pm	MTH 0106

MATH299O **Selected Topics in Mathematics; STIC: Algorithms and Probability in Board Games with a Focusof Bridge**

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

0101	Lawrence Washington	Seats (Total: 24)
	M 3:00pm - 4:15pm	ESJ B0320

MATH299T **Selected Topics in Mathematics; STIC: Homotopy Type Theory**

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

0101	Sarah Yeakel W 4:00pm - 4:50pm	Seats (Total: 20) MTH 0403

MATH310 **Introduction to Mathematical Proof**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH141; and must have completed or be concurrently enrolled in MATH240, MATH341, or MATH461; and must have completed or be concurrently enrolled in MATH241 or MATH340. Restriction: Must be in a major within the CMNS-Mathematics department. Credit only granted for: MATH307 or MATH310. Additional information: Math majors may not use this course to satisfy an upper-level requirement.

To develop the students' ability to construct a rigorous proof of a mathematical claim. Students will also be made aware of mathematical results that are of interest to those wishing to analyze a particular mathematical model. Topics will be drawn from logic, set theory, structure of the number line, elementary topology, metric spaces, functions, sequences and continuity.

0101	Kathryn Truman MWF 10:00am - 10:50am	Seats (Total: 33) MTH 0304
0201	Nathaniael Manning MWF 11:00am - 11:50am	Seats (Total: 33) MTH 0304
0301	Jeffrey Adams MWF 1:00pm - 1:50pm	Seats (Total: 33) MTH 0304
0401	Terence Long TuTh 9:30am - 10:45am	Seats (Total: 33) MTH 0304

MATH312 **Mathematical Reasoning and Proof for Pre-Service Middle School Teachers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH212 and MATH213. Restriction: Must be in one of the following programs (Elementary Education; Special Education; Middle School Education).

Reasoning and proof as addressed in the middle school curriculum. Topic include proportional reasoning, logic and proof, types of numbers, field axioms, Euclidean and non-Euclidean geometry.

0101	Monica Anthony MW 3:30pm - 4:45pm	Seats (Total: 28) MTH 0106

MATH315 **Algebra for Preservice Middle School Teachers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH212. Restriction: Must be in one of the following programs (Elementary Education; Special Education; Middle School Education). Credit only granted for: MATH112, MATH113, or MATH315.

Algebraic concepts and techniques developed in the middle grades, with their larger mathematical context. Equations, inequalities and functions (linear, polynomial, exponential, logarithmic), with multiple representations of relationships. Common misconceptions of beginning algebra students.

0101	Carolina Napp-Avelli MW 2:00pm - 3:15pm	Seats (Total: 27) EDU 2212

MATH341 **Multivariable Calculus, Linear Algebra, Differential Equations II (Honors)**

(Perm req)

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH340. Restriction: Open to second semester Freshmen only. Credit only granted for: MATH240, MATH246, MATH341 or MATH461.

A continuation of MATH340.

0101	Roohollah Ebrahimian MWF 11:00am - 12:15pm	Seats (Total: 25) MTH 0405
0201	Niranjan Ramachandran MWF 12:00pm - 1:15pm	Seats (Total: 25) MTH 0201

MATH386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Prerequisite: Must have learning proposal approved by the CMNS Mathematics Department.

Contact department for information to register for this course.

MATH401 **Applications of Linear Algebra**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH461, MATH240, MATH341).

Various applications of linear algebra: theory of finite games, linear programming, matrix methods as applied to finite Markov chains, random walk, incidence matrices, graphs and directed graphs, networks and transportation problems.

0101	Justin Wyss-Gallifent MWF 10:00am - 10:50am	Seats (Total: 33) AJC 2134
0201	Jan Peszek MWF 12:00pm - 12:50pm	Seats (Total: 33) MTH 0304
0301	Wiseley Wong MWF 2:00pm - 2:50pm	Seats (Total: 33) MTH 0303
0401	Michael Jakobson TuTh 12:30pm - 1:45pm	Seats (Total: 33) EGR 0135
0501	Tobias von Petersdorff TuTh 2:00pm - 3:15pm	Seats (Total: 28) ATL 1109
0601	Dong Dong TuTh 3:30pm - 4:45pm	Seats (Total: 33) MTH 0303

MATH402 **Algebraic Structures**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461). Restriction: Must not be in any of the following programs (Mathematics (Master's); Mathematics (Doctoral)). Credit only granted for: MATH402 or MATH403.

For students having only limited experience with rigorous mathematical proofs. Parallels MATH403. Students planning graduate work in mathematics should take MATH403. Groups, rings, integral domains and fields, detailed study of several groups; properties of integers and polynomials. Emphasis is on the origin of the mathematical ideas studied and the logical structure of the subject.

0101	Allan Yashinski MWF 11:00am - 11:50am	Seats (Total: 30) CHM 0122

MATH403 **Introduction to Abstract Algebra**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH340); and 1 course with a minimum grade of C- from (MATH341, MATH241); and minimum grade of C- in MATH310. Or students who have taken courses with comparable content may contact the department. Credit only granted for: MATH402 or MATH403.

Integers; groups, rings, integral domains, fields.

0101	Patrick Brosnan MWF 12:00pm - 12:50pm	Seats (Total: 29) MTH 0409
0201	Nathaniael Manning MWF 1:00pm - 1:50pm	Seats (Total: 29) MTH 0409

MATH404 **Field Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH403.

Algebraic and transcendental elements, Galois theory, constructions with straight-edge and compass, solutions of equations of low degrees, insolubility of the quintic equation, Sylow theorems, fundamental theorem of finite Abelian groups.

0101	James Schafer TuTh 9:30am - 10:45am	Seats (Total: 25) MTH 1311

MATH405 **Linear Algebra**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and minimum grade of C- in MATH310.

An abstract treatment of finite dimensional vector spaces. Linear transformations and their invariants.

0101	Huanchen Bao MWF 1:00pm - 1:50pm	Seats (Total: 30) CHM 0127
0201	Harry Tamvakis TuTh 9:30am - 10:45am	Seats (Total: 30) PHY 1219

MATH406 **Introduction to Number Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH241, MATH246, MATH340, MATH341, MATH461); or permission of CMNS-Mathematics department.

Integers, divisibility, prime numbers, unique factorization, congruences, quadratic reciprocity, Diophantine equations and arithmetic functions.

0101	Amin Gholampour MWF 10:00am - 10:50am	Seats (Total: 28) MTH 0405
0201	Manjit Bhatia MWF 11:00am - 11:50am	Seats (Total: 28) MTH 0401
0301	Samuel Bloom TuTh 2:00pm - 3:15pm	Seats (Total: 28) MTH B0421
0501	Adam Kanigowski TuTh 12:30pm - 1:45pm	Seats (Total: 28) PLS 1111

MATH410 **Advanced Calculus I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241); and minimum grade of C- in MATH310. Or students who have taken courses with comparable content may contact the department.

First semester of a year course. Subjects covered during the year are: sequences and series of numbers, continuity and differentiability of real valued functions of one variable, the Riemann integral, sequences of functions and power series. Functions of several variables including partial derivatives, multiple integrals, line and surface integrals. The implicit function theorem.

0101	Peter Nandori MWF 9:00am - 9:50am	Seats (Total: 32) MTH 0106
0201	Denny Gulick MWF 10:00am - 10:50am	Seats (Total: 32) MTH 0106

0301	Justin Wyss-Gallifent MWF 1:00pm - 1:50pm	Seats (Total: 32) MTH 0106
0401	Justin Wyss-Gallifent TuTh 11:00am - 12:15pm	Seats (Total: 32) MTH 0106
0501	Casey Cremins TuTh 12:30pm - 1:45pm	Seats (Total: 32) MTH 0304

MATH411 **Advanced Calculus II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH410; and permission of CMNS-Mathematics department. Credit only granted for: MATH411 or MATH412.

Continuation of MATH410.

0101	Richard Wentworth MWF 12:00pm - 12:50pm	Seats (Total: 32) MTH 0105
0201	Manoussos Grillakis TuTh 11:00am - 12:15pm	Seats (Total: 32) JMP 2202

MATH416 **Applied Harmonic Analysis: An Introduction to Signal Processing**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141; and 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and familiarity with MATLAB is required.

Introduces students to the mathematical concepts arising in signal analysis from the applied harmonic analysis point of view. Topics include applied linear algebra, Fourier series, discrete Fourier transform, Fourier transform, Shannon Sampling Theorem, wavelet bases, multiresolution analysis, and discrete wavelet transform.

0101	Wojciech Czaja TuTh 9:30am - 10:45am	Seats (Total: 25) MTH B0421

MATH420 **Mathematical Modeling**

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (MATH246, MATH341); and minimum grade of C- in STAT400. And 1 course with a minimum grade of C- from (CMSC106, CMSC131); or students who have taken courses with comparable content may contact the department. Also offered as: AMSC420. Credit only granted for: AMSC420 or MATH420.

The course will develop skills in data-driven mathematical modeling through individual and group projects. Emphasis will be placed on both analytical and computational methods, and on effective oral and written presentation of results.

0101	Charles Levermore	Seats (Total: 28)
	TuTh 11:00am - 12:15pm	CSI 4122

MATH424 **Introduction to the Mathematics of Finance**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141; and 1 course with a minimum grade of C- from (STAT400, STAT410); and permission of CMNS-Mathematics department. Recommended: MATH246, MATH240, MATH241, MATH340, or MATH341. Credit only granted for: BMGT444, MATH424.

Introduction to the mathematical models used in finance and economics with emphasis on pricing derivative instruments. Designed for students in mathematics, computer science, engineering, finance and physics. Financial markets and instruments; elements from basic probability theory; interest rates and present value analysis; normal distribution of stock returns; option pricing; arbitrage pricing theory; the multiperiod binomial model; the Black-Scholes option pricing formula; proof of the Black-Scholes option pricing formula and applications; trading and hedging of options; Delta hedging; utility functions and portfolio theory; elementary stochastic calculus; Ito's Lemma; the Black-Scholes equation and its conversion to the heat equation.

0101	Steven Chadwick	Seats (Total: 33)
	MWF 9:00am - 9:50am	CHM 1224

MATH430 **Euclidean and Non-Euclidean Geometries**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461).

Hilbert's axioms for Euclidean geometry. Neutral geometry: the consistency of the hyperbolic parallel postulate and the inconsistency of the elliptic parallel postulate with neutral geometry. Models of hyperbolic geometry. Existence and properties of isometries.

0101	Brian Collier	Seats (Total: 25)
	TuTh 9:30am - 10:45am	MTH 0403

MATH437 **Differential Forms**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461). Recommended: MATH405, MATH403, MATH436, MATH410, or MATH432.

Introduction to differential forms and their applications, and unites the fundamental theorems of multivariable calculus in a general Stokes Theorem that is valid in great generality. It develops this theory and technique to perform calculations in analysis and geometry. Topics include an introduction to topological spaces, the Gauss-Bonnet Theorem, Gauss's formula for the linking number, and the Cauchy Integral Theorem. Applications include Maxwell's equations of electromagnetism, connections and gauge theory, and symplectic geometry and Hamiltonian dynamics.

0101	Richard Wentworth	Seats (Total: 25)
	MWF 2:00pm - 2:50pm	MTH B0429

MATH446 **Axiomatic Set Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH403, MATH410).

Development of a system of axiomatic set theory, choice principles, induction principles, ordinal arithmetic including discussion of cancellation laws, divisibility, canonical expansions, cardinal arithmetic including connections with the axiom of choice, Hartog's theorem, Konig's theorem, properties of regular, singular and inaccessible cardinals.

0101	Michael Laskowski	Seats (Total: 22)
	MWF 12:00pm - 12:50pm	MTH 0101

MATH456 **Cryptography**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: (CMSC106, CMSC131, or ENEE150; or equivalent programming experience); and (2 courses from (CMSC330, CMSC351, ENEE324, or ENEE380); or any one of these courses and a 400-level MATH course, or two 400-level MATH courses). Or permission of instructor. Also offered as: CMSC456, ENEE456. Credit only granted for: MATH456, CMSC456 or ENEE456.

The theory, application, and implementation of mathematical techniques used to secure modern communications. Topics include symmetric and public-key encryption, message integrity, hash functions, block-cipher design and analysis, number theory, and digital signatures.

0101	Lawrence Washington TuTh 11:00am - 12:15pm	Seats (Total: 86) ATL 2324	
0201	Jonathan Katz TuTh 2:00pm - 3:15pm	Seats (Total: 140) ESJ 2208	
0301	Dana Dachman-Soled MW 2:00pm - 3:15pm	Seats (Total: 45) CSI 3117	

MATH461 **Linear Algebra for Scientists and Engineers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141; and must have completed any MATH or STAT course with a prerequisite of MATH141. Credit only granted for: MATH240, MATH341, or MATH461. Additional information: This course may not be used towards the upper level math requirements for MATH/STAT majors.

Basic concepts of linear algebra. This course is similar to MATH 240, but with more extensive coverage of the topics needed in applied linear algebra: change of basis, complex eigenvalues, diagonalization, the Jordan canonical form.

0111	Manoussos Grillakis TuTh 2:00pm - 3:15pm W 9:00am - 9:50am	Seats (Total: 29) ARM 0131 MTH B0421	Discussion
0112	Manoussos Grillakis TuTh 2:00pm - 3:15pm W 9:00am - 9:50am	Seats (Total: 29) ARM 0131 MTH 0405	Discussion
0113	Manoussos Grillakis TuTh 2:00pm - 3:15pm W 9:00am - 9:50am	Seats (Total: 29) ARM 0131 MTH 0411	Discussion
0121	Manoussos Grillakis TuTh 2:00pm - 3:15pm W 10:00am - 10:50am	Seats (Total: 29) ARM 0131 MTH B0423	Discussion

0122	Manoussos Grillakis TuTh 2:00pm - 3:15pm W 10:00am - 10:50am	Seats (Total: 26) ARM 0131 MTH 1311	Discussion
0131	Manoussos Grillakis TuTh 2:00pm - 3:15pm W 11:00am - 11:50am	Seats (Total: 27) ARM 0131 MTH 0104	Discussion
0132	Manoussos Grillakis TuTh 2:00pm - 3:15pm W 11:00am - 11:50am	Seats (Total: 29) ARM 0131 MTH 0103	Discussion
0141	Manoussos Grillakis TuTh 2:00pm - 3:15pm W 2:00pm - 2:50pm	Seats (Total: 27) ARM 0131 MTH 0102	Discussion
0142	Manoussos Grillakis TuTh 2:00pm - 3:15pm W 2:00pm - 2:50pm	Seats (Total: 29) ARM 0131 MTH 0401	Discussion

MATH462 **Partial Differential Equations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (MATH246, MATH341).

Linear spaces and operators, orthogonality, Sturm-Liouville problems and eigenfunction expansions for ordinary differential equations. Introduction to partial differential equations, including the heat equation, wave equation and Laplace's equation. Boundary value problems, initial value problems and initial-boundary value problems.

0101	David Hamilton MWF 10:00am - 10:50am	Seats (Total: 25) MTH 0305	
0201	Antoine Mellet TuTh 2:00pm - 3:15pm	Seats (Total: 25) MTH 0306	

MATH463 **Complex Variables**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH241, MATH340).

The algebra of complex numbers, analytic functions, mapping properties of the elementary functions. Cauchy integral formula. Theory of residues and application to evaluation of integrals. Conformal mapping.

0101	Samuel Braunfeld TuTh 12:30pm - 1:45pm	Seats (Total: 33) HBK 0103
0201	Allan Yashinski TuTh 2:00pm - 3:15pm	Seats (Total: 33) MTH 0305

MATH464 **Transform Methods for Scientists and Engineers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH246, MATH341).

Fourier transform, Fourier series, discrete fast Fourier transform (DFT and FFT). Laplace transform. Poisson summations, and sampling. Optional Topics: Distributions and operational calculus, PDEs, Wavelet transform, Radon transform and applications such as Imaging, Speech Processing, PDEs of Mathematical Physics, Communications, Inverse Problems.

0101	Vadim Kaloshin TuTh 11:00am - 12:15pm	Seats (Total: 28) MTH 0411

MATH470 **Mathematics for Secondary Education**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH141 and MATH140; and must have completed one 400-level MATH course (not to include MATH461, 478, and 480's).

An advanced perspective on some of the core mathematics underlying high school mathematics courses. Topics include number systems, functions of one variable, equations, inequalities, trigonometric functions, curve fitting, and polynomials. The course includes an analysis of alternate approaches to mathematical ideas and problems, and makes connections between ideas that may have been studied separately in different high school and college courses.

0101	Dana Grosser-Clarkson TuTh 2:00pm - 3:15pm	Seats (Total: 25) PHY 1402

MATH475 **Combinatorics and Graph Theory**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461); and 1 course with a minimum grade of C- from (MATH241, MATH340); and permission of CMNS-Mathematics department. Also offered as: CMSC475. Credit only granted for: MATH475 or CMSC475.

General enumeration methods, difference equations, generating functions. Elements of graph theory, matrix representations of graphs, applications of graph theory to transport networks, matching theory and graphical algorithms.

0101	Roohollah Ebrahimian	Seats (Total: 32)
	MWF 10:00am - 10:50am	MTH 0303

MATH478A **Selected Topics For Teachers of Mathematics**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

MATH489 **Research Interactions in Mathematics; Research Interactions in Mathematics**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Students participate in a vertically integrated (undergraduate, graduat and/or postdoctoral, faculty) mathematics research group. Format varies. Students and supervising faculty will agree to a contract which must be approved by the department. Up to three credits of MATH489 may be applied to the mathematics degree requirements. See the department's MATH489 online syllabus for further information.

Contact department for information to register for this course.

MATH498A **Selected Topics in Mathematics**

(Perm req)

Credits: 1-9

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduate students will be offered occasionally under the general guidance of the departmental committee on undergraduate studies.

Contact department for information to register for this course.

MATH601 **Abstract Algebra II**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: MATH600.

Field theory, Galois theory, multilinear algebra. Further topics from: Dedekind domains, Noetherian domains, rings with minimum condition, homological algebra.

Offered Spring only.

0101	Xuhua He	Seats (Total: 25)
	MWF 11:00am - 11:50am	MTH 0402

MATH603 **Commutative Algebra**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH600.

Ideal theory of Noetherian rings, valuations, localizations, complete local rings, Dedekind domains.

0101	Jonathan Rosenberg	Seats (Total: 20)
	MWF 10:00am - 10:50am	MTH 0104

MATH607 **Algebraic Geometry II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH606.

Topics in contemporary algebraic geometry chosen from among: theory of algebraic curves and surfaces, elliptic curves, Abelian varieties, theory of schemes, theory of zeta functions, formal cohomology, algebraic groups, reduction theory.

0101	Harry Tamvakis	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	MTH 0102

MATH631 **Real Analysis II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH630.

Abstract measure and integration theory, metric spaces, Baire category theorem and uniform boundedness principle, Radon-Nikodym theorem, Riesz Representation theorem, Lebesgue decomposition, Banach and Hilbert Spaces, Banach-Steinhaus theorem, topological spaces, Arzela-Ascoli and Stone-Weierstrass theorems, compact sets and Tychonoff's theorem.

Offered Spring only.

0101	Radu Balan	Seats (Total: 19)
	TuTh 12:30pm - 1:45pm	CSI 4122

MATH660 **Complex Analysis I**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH410; or students who have taken courses with comparable content may contact the department.

Linear transformations, analytic functions, conformal mappings, Cauchy's theorem and applications, power series, partial fractions and factorization, elementary Riemann surfaces, Riemann's mapping theorem.

0101	Michael Jakobson	Seats (Total: 25)
	TuTh 9:30am - 10:45am	MTH 1313

MATH674 **Partial Differential Equations II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH673 or AMSC673; or permission of instructor. Also offered as: AMSC674. Credit only granted for: AMSC674 or MATH674.

Boundary value problems for elliptic partial differential equations via operator-theoretic methods. Hilbert spaces of functions. Duality, weak convergence. Sobolev spaces. Spectral theory of compact operators. Eigenfunction expansions.

Offered Spring only.

0101	Konstantina Trivisa	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	MTH 0403

MATH689 **Research Interactions in Mathematics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

The students participate in a vertically integrated (undergraduate, graduate and/or postdoctoral, faculty) research group. Format varies, but includes regular meetings, readings and presentations of material. See graduate program's online syllabus or contact the graduate program director for more information.

Contact department for information to register for this course.

MATH713 **Mathematical Logic II**

Credits: 3 | Grading Method: Regular, Audit

Prerequisite: MATH712.

Incompleteness and undecidability results of Godel, Church, Tarski and others. Recursive function. Basic proof theory and axiomatic set theory.

0101	Michael Laskowski	Seats (Total: 18)
	MWF 2:00pm - 2:50pm	MTH 0201

MATH734 **Algebraic Topology**

Credits: 3 | Grading Method: Regular, Audit

Prerequisite: MATH403; or students who have taken courses with comparable content may contact the department. Recommended: MATH730.

Singular homology and cohomology, cup products, Poincare duality, Eilenberg-Steenrod axioms, Whitehead and Hurewicz theorems, universal coefficient theorem, cellular homology.

0101	Joel Cohen	Seats (Total: 20)
	TuTh 9:30am - 10:45am	Location: TBA

MATH740 **Fundamental Concepts of Differential Geometry**

Credits: 3 | Grading Method: Regular, Audit

Prerequisite: MATH405, MATH411, and MATH730; or students who have taken courses with comparable content may contact the department.

Manifolds, tangent vectors and differential forms, Riemannian metrics, connections, curvature, structure equations, geodesics, calculus of variations.

0101	Tamas Darvas	Seats (Total: 18)
	TuTh 2:00pm - 3:15pm	MTH B0431

MATH799 **Master's Thesis Research**

Credits: 1-6 | Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

MATH808A **Selected Topics in Algebra**

Credits: 1-3 Grading Method: Regular

Advanced topics of current interest.

Contact department for information to register for this course.

MATH808M **Selected Topics in Algebra; Arithmetic of Modular Curves**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

0101	Thomas Haines	Seats (Total: 20)
	MWF 12:00pm - 12:50pm	MTH B0429

MATH818A **Selected Topics in Logic**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

MATH848A **Selected Topics in Geometry and Topology**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

MATH848G **Selected Topics in Geometry and Topology; Dynamics on Moduli Spaces**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

0101	William Goldman	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	MTH 1311

MATH858A **Selected Topics in Analysis; Long Time Dynamics of Kinetic Equations**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

MATH858D **Selected Topics in Analysis; Stochastic Methods with Applications**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

0101	Maria Cameron	Seats (Total: 20)
	MWF 12:00pm - 12:50pm	MTH 0102

MATH858T **Selected Topics in Analysis; Minimal Cantor Systems**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

0101	Rodrigo Trevino	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	PHY 1219

MATH868A **SelectedTopics in Complex Analysis**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

MATH898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

MATH899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

MEES Marine-Estuarine-Environmental Sciences Spring 2019

MEES432 **Physiological Ecology of Animals**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI361; or students who have taken courses with comparable content may contact the department; or permission of instructor. Credit only granted for: MEES498E, MEES698E, MEES432, or MEES632. Formerly: MEES498E.

An examination of the influence of environmental constrains on animal function and energetic efficiency in the context of abiotic conditions in the habitats occupied by individuals.

Taught at Chesapeake Biological Laboratories (CBL) and over the Interactive Video Network (IVN).

0101	Christopher Rowe	Seats (Total: 10)
	MW 8:30am - 9:50am	HJP 1213B

MEES498T **Topics in Marine-Estuarine-Environmental Sciences; Marine and Environmental Biotechnology**

Credits: 4

Grading Method: Regular, Audit

Lecture and/or laboratory series organized to study a selected area of marine-estuarine-environmental sciences not otherwise considered in formal courses.

Taught at Institute of Marine and Environmental Technology (IMET) and over the Interactive Video Network (IVN).

0101	Jum Sook Chung	Seats (Total: 10)
	MW 10:00am - 11:20am Contact instructor or department for details.	HJP 1213C

MEES608F **Seminar in Marine-Estuarine-Environmental Sciences; Current Topics in Fisheries Science: Best Papers in Fisheries**

Credits: 1

Grading Method: Regular, Audit

This class will explore topics of current interest in the fisheries sciences. The class will consist of a mix of readings and presentations by students and/or professional fishery scientists concerning different aspects of fisheries and their management. Students will explore current and classic literature on the selected topics, and complete a final project that could be a presentation or group project. Students will select topics from lists of Best Papers in Fisheries originating from several different sources, and use those papers as a basis to explore related literature.

0101	Bradley Stevens	Seats (Total: 15)
	Th 2:00pm - 3:15pm	HJP 1213C

MEES609A **Professional Development in Marine Estuarine Environmental Science; Applied Environmental Science**

Credits: 2 Grading Method: Regular, Audit

Training designed for existing and future careers.

Taught at Chesapeake Biological Laboratories (CBL) and over the Interactive Video Network (IVN).

0101	Carys Mitchelmore, William Dennison, Thomas Miller	Seats (Total: 40)
	W 1:00pm - 2:50pm	HJP 1213B

MEES611 **Estuarine Systems Ecology**

Credits: 3 Grading Method: Regular, Audit

A broad systems perspective on the important components and processes o estuarine ecosystems, with quantitative and/or mathematical treatment toward development of representative models for estuarine dynamics.

Taught at Chesapeake Biological Laboratories (CBL) and over the Interactive Video Network (IVN)

0101	Jeremy Testa	Seats (Total: 20)
	Meets January 28, 2019 - May 14, 2019	
	TuTh 9:30am - 10:50am	HJP 1213B

MEES621 **Biological Oceanography**

Credits: 4 Grading Method: Regular, Audit

Population and community ecology of estuarine and marine systems; coastal and estuarine processes are emphasized in the context of oceans in general. Field and lab trips required.

Taught over the Interactive Video Network.

0101	Louis Plough, Raleigh Hood, Judith O'Neil	Seats (Total: 15)
	TuTh 12:00pm - 2:00pm	HJP 1213B

MEES627 **Environmental Geochemistry II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MEES626; or permission of instructor. Credit only granted for: MEES627 or MEES698K. Formerly: MEES698K.

Detailed examination of aquatic geochemical cycles, including inorganic and organic geochemistry. Topics include global biogeochemical cycles, estuarine cycling, redox cycles, radiochemistry, stable isotope biogeochemistry and sediment biogeochemistry/diagenesis.

Taught over the Interactive Video Network (IVN)

0101	Hali Kilbourne, Sairah Malkin, Jeffrey Cornwell **Meets January 28, 2019 - May 14, 2019** MW 8:30am - 9:50am	Seats (Total: 20) HJP 1213C

MEES632 **Physiological Ecology of Animals**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: MEES698E, MEES498E, MEES432, MEES632. Formerly: MEES698E.

An examination of the influence of environmental constrains on animal function and energetic efficiency in the context of abiotic conditions in the habitats occupied by individuals.

Taught at Chesapeake Biological Laboratories (CBL) and over the Interactive Video Network (IVN).

0101	Christopher Rowe MW 8:30am - 9:50am	Seats (Total: 10) HJP 1213B

MEES661 **Physics of Estuarine and Marine Environments**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed one year of physics coursework; and must have completed one year of calculus coursework. Or permission of instructor.

General introduction to the physical oceanography of estuarine and marine systems. Physical characteristics of seawater, heat and mass transport, major ocean currents, basic dynamical oceanography, surface waves, tides, turbulence, sediment transport, estuarine circulation.

Taught at Horn Point Laboratories (HPL) and over the Interactive Video Network (IVN)

0101	Victoria Coles, Ming Li **Meets January 28, 2019 - May 14, 2019** TuTh 2:00pm - 3:20pm	Seats (Total: 20) HJP 1213B

MEES681 **Advanced Ecological Design**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed one semester of calculus; and (CHEM131 and PHYS121). Or permission of instructor. Also offered as: ENST681. Credit only granted for: ENST481, ENST681, or MEES681.

An advanced survey course on the field of ecological design. Principles of design are illustrated with case studies from biologically-based waste treatment systems, ecosystem management and sustainable development.

0101	Stephanie Lansing	Seats (Total: 20)
	TuTh 9:30am - 10:45am	HJP 1213C

MEES698G **Special Topics in Marine-Estuarine-Environmental Sciences; Sediment Dynamics in Coast and Estuarine Environments**

Credits: 3 Grading Method: Regular, Audit

Credit according to time schedule and course organization. Lecture and/or laboratory series organized to study selected areas of environmental science not otherwise considered by existing courses. May be repeated for credit since topic coverage will change.

Taught at Horn Point Laboratories (HPL) and over the Interactive Video Network (IVN)

0101	Cindy Palinkas, William Nardin	Seats (Total: 20)
	Meets January 28, 2019 - May 14, 2019	
	MW 3:00pm - 4:20pm	HJP 1213B

MEES698K **Special Topics in Marine-Estuarine-Environmental Sciences; Introduction to GIS**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Credit according to time schedule and course organization. Lecture and/or laboratory series organized to study selected areas of environmental science not otherwise considered by existing courses. May be repeated for credit since topic coverage will change.

Restriction: Permission of Department. This class is self paced and not over IVN.

0101	Matthew Fitzpatrick	Seats (Total: 15)
	Contact instructor or department for details.	

MEES698T **Special Topics in Marine-Estuarine-Environmental Sciences; Marine and Environmental Biotechnology**

Credits: 4 Grading Method: Regular, Audit

Credit according to time schedule and course organization. Lecture and/or laboratory series organized to study selected areas of environmental science not otherwise considered by existing courses. May be repeated for credit since topic coverage will change.

Taught at Institute of Marine and Environmental Technology (IMET) and over the Interactive Video Network (IVN).

0101	Jum Sook Chung	Seats (Total: 10)
	MW 10:00am - 11:20am Contact instructor or department for details.	HJP 1213C

MEES699 **Special Problems in Marine-Estuarine-Environmental Sciences**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Research on specialized topics under the direction of individual faculty members.

Contact department for information to register for this course.

MEES708M **Advanced Topics in Marine-Estuarine-Environmental Science; Environmental Statistic II**

Credits: 3 Grading Method: Regular, Audit

Lectures, experimental courses and other specialized graduate training in various relevant disciplines.

Taught over the Interactive Video Network (IVN). This course will extend statistical training of the students to advanced topics of time series analysis and spatial statistics. After taking this course, students will be familiar with a variety of state-of-the-art approaches for qualitative analysis of time- and space-dependent data. Students will become competent users of these methods by practicing them in class and in their homework assignments using the statistical programming language R.

0101	Viacheslav Lyubchich, Dong Liang	Seats (Total: 30)
	TuTh 3:30pm - 5:00pm	HJP 1213C

MEES712 **Advanced Population Dynamics and Assessment**

Credits: 4 Grading Method: Regular, Audit

Prerequisite: MEES607 or BIOM601; or permission of instructor. Credit only granted for: MEES698D or MEES712. Formerly: MEES698D.

Quantitative and modeling skills, including understanding of population dynamics and responses of populations to exploitation and management actions. Coverage of population models of production, mortality, stock and recruitment, age and growth, and harvesting, and methods for using these models to provide management advice.

Taught at Chesapeake Biological Laboratories (CBL) and over the Interactive Video Network (IVN)

0101	Michael Wilberg	Seats (Total: 20)
	Meets January 28, 2019 - May 14, 2019	
	MW 10:00am - 11:20am	HJP 1213B
	F 10:00am - 10:50am	HJP 1213B

MEES743 **Aquatic Toxicology**

Credits: 3 Grading Method: Regular, Audit

Comprehensive course in which a definitive description of basic concepts and principles, laboratory testing and field situations, as well as examples of typical data and their interpretation and use by industry and water resource managers, will be discussed. The toxicological action and fate of environmental pollutants will be examined in aquatic ecosystems, whole organisms and at the cellular, biochemical and molecular levels.

Taught at Chesapeake Biological Laboratories (CBL) and over the Interactive Video Network (IVN)

0101	Carys Mitchelmore	Seats (Total: 20)
	Meets January 28, 2019 - May 14, 2019	
	MW 11:30am - 12:50pm	HJP 1213B

MEES799 **Masters Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

MEES898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

MEES899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

MIEH Maryland Institute for Applied Environmental Health Spring 2019

MIEH300 **A Public Health Perspective: Introduction to Environmental Health**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CHEM131 and CHEM132; and must have completed or be concurrently enrolled in SPHL100 or PHSC300. Restriction: Must have earned a minimum of 60 credits. And must be in Public Health Science program; or permission of SPHL-School of Public Health. Credit only granted for: SPHL498N or MIEH300. Formerly: SPHL498N.

Environmental health is that branch of public health that deals with the human health effects of exposure to chemical, physical, and biological agents in the community, workplace, and home. Activities within Environmental Health Sciences are associated with recognizing, assessing, understanding, and mitigating the impacts of chemical, physical, and biological agents as well as understanding how human behavior and action impacts the environment. This course focuses on the central concepts, principles, issues, and applications of the essential scientific components and strategies of control of major environmental health problems.

0101	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am	SPH 1312	
	W 10:00am - 10:50am	SPH 0302	Discussion
	Restricted to College Park Students in the Public Health Science major (code 12140).		
0102	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am	SPH 1312	
	W 11:00am - 11:50am	SPH 0302	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0103	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am	SPH 1312	
	W 12:00pm - 12:50pm	SPH 0302	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0105	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am	SPH 1312	
	F 9:00am - 9:50am	HBK 0108	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0106	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am	SPH 1312	
	F 10:00am - 10:50am	HBK 0108	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		

0107	Kendall Bustad MW 9:00am - 9:50am F 11:00am - 11:50am	Seats (Total: 20) SPH 1312 HBK 0108	Discussion
	Restricted to College Park Students in the Public Health Science major (code 12140).		
0108	Kendall Bustad MW 9:00am - 9:50am F 12:00pm - 12:50pm	Seats (Total: 20) SPH 1312 HBK 0108	Discussion

MIEH309 **Environmental Health Research**

(Perm req)

Credits: 1-3 Grading Method: Regular

This research-based course will provide undergraduates with the opportunity to work closely with one of the faculty researchers in the Maryland Institute for Applied Environmental Health (MIAEH) within the School of Public Health. Our research covers multiple fields within the environmental health sciences (e.g. environmental epidemiology, exposure science, risk assessment, environmental microbiology, environmental microbial genomics, food toxicology, airborne infection transmission, environmental justice, and children's environmental health) that involve either laboratory-based research or non-laboratory based studies. Students will not only gain invaluable research and interpersonal skills but also contribute to MIAEH's ongoing environmental health research programs.

0201	Paul Turner Contact instructor or department for details.	Seats (Total: 10)
0202	Amir Sapkota Contact instructor or department for details.	Seats (Total: 10)
0203	Amy Sapkota Contact instructor or department for details.	Seats (Total: 10)
0204	Donald Milton, Jennifer German Contact instructor or department for details.	Seats (Total: 40)
0205	Robin Puett Contact instructor or department for details.	Seats (Total: 10)
0206	Sacoby Wilson Contact instructor or department for details.	Seats (Total: 20)
0207	Lesliam Quiros Alcala Contact instructor or department for details.	Seats (Total: 10)

0208	Devon Payne-Sturges Contact instructor or department for details.	Seats (Total: 10)
0209	Muhiuddin Haider Contact instructor or department for details.	Seats (Total: 10)
0210	Elisabeth Maring Contact instructor or department for details.	Seats (Total: 10)
0211	Kristin Cipriani Contact instructor or department for details.	Seats (Total: 5)

MIEH321 **Syphilis to SARS: Climate Change, Development and Emergence of Infectious Diseases**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Syphilis to SARS will examine the influences of environmental factors, economic development, migration, and land use changes on emergence and reemergence of infectious diseases. Population growth, development, and climate change are impacting natural reservoirs of infectious diseases and how they transmit through human populations. The course will look at both historical accounts and newly emerging and reemerging diseases including influenza as examples of our role in altering the diseases that threaten us. We will also critically evaluate how the issues are portrayed in news and entertainment media and controversy about the ethics of research on deadly viruses.

SG91	Michael Bazaco W 6:00pm - 8:30pm *Registration is restricted to Biological Sciences- Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.*	Seats (Total: 30) Location: TBA

MIEH331 **The Built Environment, Sustainability, and Public Health: The Good, the Bad, and the Ugly**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MIEH300; or permission of instructor. Credit only granted for: MIEH215 or MIEH331. Formerly: MIEH215.

Provides students with a fundamental understanding of theory, concepts, and issues related to the built environment; how the built environment influences behaviors and health outcomes; and opportunities to improve the built environment through planning, zoning, and community development initiatives that can make communities healthier, just, and more sustainable.

0101	Sacoby Wilson	Seats (Total: 30)	
	TuTh 12:30pm - 1:45pm	SPH 1303	
	Restricted to College Park students in the Public Health Science major.		
SG91	James McDevitt	Seats (Total: 30)	
	Class time/details on ELMs	ONLINE	
	Restricted to Shady Grove students in the Public Health Science major.		

MIEH400 **Introduction to Global Health**

Credits: 3 Grading Method: Regular General Education: DVUP

Prerequisite: Minimum grade of C- in MIEH300; and 1 course with a minimum grade of C- from (SPHL100, PHSC300). Restriction: Must be in the Public Health Science program or must have permission of the program director; and must have completed 60 credits. Credit only granted for: MIEH400 or SPHL498A. Formerly: SPHL498A.

Exploration of theoretical frameworks and practical perspectives on issues shaping the global health panorama. Determinants examined through: biological and epidemiological; social, cultural and economic; environmental and geographic; multi-section, legal and institutional perspectives with synopsis of how these issues are addressed by international and community organizations in developing countries.

0101	Amir Sapkota	Seats (Total: 20)	
	MW 4:00pm - 4:50pm	ESJ 2208	
	Th 11:00am - 11:50am	CHM 0124	Discussion
	Restricted to College Park Students in the Public Health Science major (code 12140).		
0102	Amir Sapkota	Seats (Total: 20)	
	MW 4:00pm - 4:50pm	ESJ 2208	
	Th 12:30pm - 1:20pm	BPS 1238	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0103	Amir Sapkota	Seats (Total: 20)	
	MW 4:00pm - 4:50pm	ESJ 2208	
	Th 2:00pm - 2:50pm	CHM 0124	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0104	Amir Sapkota	Seats (Total: 20)	
	MW 4:00pm - 4:50pm	ESJ 2208	
	F 9:00am - 9:50am	SPH 0302	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		

0105	Amir Sapkota	Seats (Total: 20)	
	MW 4:00pm - 4:50pm F 10:00am - 10:50am	ESJ 2208 SPH 0302	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0106	Amir Sapkota	Seats (Total: 20)	
	MW 4:00pm - 4:50pm F 11:00am - 11:50am	ESJ 2208 SPH 0302	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
SG91	Negin Fouladi	Seats (Total: 40)	
	M 2:00pm - 4:30pm	BLD3 3219	
	Restricted to Shady Grove Students in the Public Health Science major (code 12140).		

MIEH609 **Methods in Environmental Health**

Credits: 1-3 Grading Method: Regular

This research-based rotation in environmental health sciences will provide graduate students with the opportunity to work closely with faculty researchers in the Maryland Institute for Applied Environmental Health (MIAEH) within the School of Public Health. Our research covers multiple fields within the environmental health sciences (e.g. environmental epidemiology, exposure science, risk assessment, environmental microbiology, environmental microbiology, environmental microbial genomics, food toxicology, airborne infection transmission, environmental justice, and children's environmental health) that involve either laboratory-based research or non-laboratory based studies. Students will not only gain invaluable research experience and interpersonal skills but also contribute to MIAEH's ongoing environmental health research programs.

0201	Paul Turner	Seats (Total: 5)
	Contact instructor or department for details.	
0202	Amir Sapkota	Seats (Total: 5)
	Contact instructor or department for details.	
0203	Amy Sapkota	Seats (Total: 5)
	Contact instructor or department for details.	
0204	Donald Milton	Seats (Total: 5)
	Contact instructor or department for details.	
0205	Robin Puett	Seats (Total: 5)
	Contact instructor or department for details.	

0206	Sacoby Wilson Contact instructor or department for details.	Seats (Total: 5)
0207	Lesliam Quiros Alcala Contact instructor or department for details.	Seats (Total: 5)
0208	Devon Payne-Sturges Contact instructor or department for details.	Seats (Total: 5)

MIEH610 **Global Health Program Planning and Evaluation**

Credits: 3 Grading Method: Regular, Audit

Recommended: MIEH605. Credit only granted for: MIEH610, SPHL610 or SPHL698D. Formerly: SPHL698D and SPHL610.

Development of health program and evaluation plans to address critical health problems in international settings, especially transitional or in-conflict countries. Emphasis on linking a tactical program plan to overall health problems of a nation, to include the policy and economic issues involved in assessment, implementation and evaluation.

GH01	Paul Robinson W 5:00pm - 7:30pm Class time/details on ELMs	Seats (Total: 15) ATL 0201 ONLINE

MIEH688 **Seminar in the Maryland Institute for Applied Environmental Health: Current Topics in Environmental Health**

Credits: 1 Grading Method: Sat-Fail

Invited and in-house research presentations from guest scientists, faculty members, and students, and critical analysis of journal articles on current topics in environmental and occupational health.

0101	Donald Milton Tu 11:00am - 12:00pm	Seats (Total: 10) SPH 2234CC

MIEH690 **UMD Global STEWARDS: Experiential Exploration of Innovations at the Nexus of Food, Energy, and Water Systems (INFEWS)**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of instructor.

Experiential introduction to broad food, energy, water (FEW) nexus topics, focusing on how integration across the biological, physical, social, behavioral, computer and engineering sciences will be critical in solving FEW systems challenges. FEW nexus issues from molecular to societal levels and from local to global scales will be covered. Course meetings will include active learning-based lectures, field trips, hands-on activities, student-led discussions, guest lectures and case studies focused on domestic and international FEW challenges.

0101	Amy Sapkota	Seats (Total: 15)
	W 9:00am - 11:45am	ATL 0201

MIEH699 **UMD Global STEWARDS: Seminal Findings, and Research and Policy in Progress at the Food, Energy, Water Nexus**

(Perm req)

Credits: 1 Grading Method: Sat-Fail, Audit

Engaging discourse covering seminal findings, as well as research and policy in progress at the food, energy, water (FEW) nexus. Course meetings will include dissections of groundbreaking FEW nexus articles; presentations by faculty members and students, followed by interdisciplinary discussions; and presentations by visiting leaders working at the FEW nexus across career sectors.

Engaging discourse covering seminal findings, as well as research and po licy in progress at the food-energy-water (FEW) nexus. Course meetings w ill include dissections of groundbreaking FEW nexus articles; presentati ons by faculty members and students, followed by interdisciplinary discu ssions; and presentations by visiting leaders working at the FEW nexus a cross career sectors.

0101	Amy Sapkota	Seats (Total: 15)
	F 12:00pm - 12:50pm	SPH 2234CC

MIEH720 **Principles of Toxicology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MIEH600; or permission of instructor. Recommended: Must have completed some coursework in chemistry and/or biology.

Overview of toxicology, including exposure pathways, toxicokinetics, dermal toxicants, carcinogens, and genetic, reproductive, immuno-, nuero-, target organs, complex mixtures, structure-activity analysis, and determinants of hypo- and hyper-susceptibility. Case studies of global national and regional interest.

0101	Paul Turner	Seats (Total: 25)
	Th 1:00pm - 3:45pm	JMP 2202

MIEH771 **Exposure Assessment of Environmental Hazards**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: MIEH600; and must have completed a graduate level statistics course with a B- or higher. Or permission of instructor.

Approaches and methods for determining exposure to environmental contaminants. Biomonitoring and genetic methods to detect recent exposures. Optimizing exposure assessment.

0101	Amir Sapkota Th 4:00pm - 6:45pm	Seats (Total: 25) Location: TBA

MIEH785 **Internship in Public Health**

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of SPHL-Maryland Institute for Applied Environmental Health. Credit only granted for: MIEH785 or MIEH778.

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

0101	Paul Turner Contact instructor or department for details.	Seats (Total: 5)

MIEH786 **Capstone Project in Public Health**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Permission of SPHL-Maryland Institute for Applied Environmental Health.

Capstone experience provding opportunity to apply knowledge and skills to a specific public health problem or issue. Completion of project relevant to public health under the direction of an advisor.

0201	Paul Turner Contact instructor or department for details.	Seats (Total: 5)
0202	Amir Sapkota Contact instructor or department for details.	Seats (Total: 5)
0203	Amy Sapkota Contact instructor or department for details.	Seats (Total: 5)

0204	Donald Milton Contact instructor or department for details.	Seats (Total: 5)
0205	Robin Puett Contact instructor or department for details.	Seats (Total: 5)
0206	Sacoby Wilson Contact instructor or department for details.	Seats (Total: 5)
0207	Lesliam Quiros Alcala Contact instructor or department for details.	Seats (Total: 5)
0208	Devon Payne-Sturges Contact instructor or department for details.	Seats (Total: 5)

MIEH788 **Critical Readings in Environmental Health**

Credits: 1-3 Grading Method: Regular, Audit

In-depth examination and critical discussion of the current literature relevant to environmental health.

Contact department for information to register for this course.

MIEH789 **Independent Study**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Individual reading and/or research under a specific faculty member in the department.

Contact department for information to register for this course.

MIEH799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

MIEH898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

MIEH899 **Doctoral Dissertation Research**

(Perm req) Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

MITH Maryland Institute for Technology in the Humanities Spring 2019

MITH388 Digital Humanities Research Assistantship

Credits: 1-3 Grading Method: Regular, Pass-Fail

An applied introduction to the theory and practice of digital research. The internship includes regular meetings with MITH staff, including designers, developers, information professionals, project managers, and faculty, to gain knowledge of existing digital scholarship and resources within the arts and humanities. Students may contribute to existing MITH projects or propose a small, independent research project on which they will receive support from MITH staff.

Also offered as ENGL388T. Credit only granted for MITH388 or ENGL388T.

0101	Purdom Lindblad	Seats (Total: 10)
	Contact instructor or department for details.	

MITH610 Introduction to Digital Studies in the Arts and Humanities

Credits: 3 Grading Method: Regular

An introduction to digital studies in the arts and humanities, broadly conceived as the critical, creative, and practical engagement with digital media, methods, tools, and experiences, as well as the theoretical and conceptual bases for understanding them.

Also offered as AMST629U. Credit granted for MITH610 or AMST629U. Digital Studies is an interdisciplinary approach to scholarship and teaching that combines the critical study of new forms of digital media, culture, and identity with creative practices and the application of computational tools to areas of humanistic study. While it is often hands-on or applied, Digital Studies also demands approaches that are primarily critical, theoretical, speculative, or experimental- imaginative-in nature. Broadly speaking then, Digital Studies is a response to the widespread influence of digital media across nearly every aspect of contemporary life; more specifically, it recognizes that teaching, research, and scholarship in the arts and humanities cannot and will not remain isolated from the networks, platforms, and media providers all around us. This course is designed to introduce you to several different (and divergent) topics and practices in this diverse, complex, and rapidly changing area.

0101	Jason Farman	Seats (Total: 15)
	Th 4:00pm - 6:40pm	TWS 0134

MITH729 Colloquium in Digital Studies

(Perm req) Credits: 1 Grading Method: Sat-Fail

Colloquium in support of the ARHU-MITH Graduate Certificate in Digital Studies. We will meet periodically (approximately 4-5 times a semester) to read and discuss current work in the field, interact with visiting speakers, share work in progress, learn new tools and methods, and hear research presentations from one another.

Also offered as ENGL798D. Credit granted for MITH729 or ENGL798D.Class meets in TWS 3136 on the following dates:2/2, 3/2, 4/6, and 5/4.

0101	Matthew Kirschenbaum	Seats (Total: 20)
	Meets February 10, 2019 - April 28, 2019	
	F 3:00pm - 5:00pm	Location: TBA

MITH735 Anatomy of Digital Humanities Research

Credits: 3 Grading Method: Regular, Audit

Positioned as a companion to a disciplinary research methods course, this course emphasizes best practices and critical approaches in the context of the lifecycle of a collaborative research project from ideation to publication to preservation. This course explores common digital methodologies as it teaches collaboration and fast prototyping to help students develop a reflexive critical approach to digital research projects. Upon completing the course, students will have a research plan, including the beginnings of a literature review, wireframes, and proposal for the lifecycle of the research project.

0101	Purdom Lindblad	Seats (Total: 20)
	W 1:00pm - 3:30pm	HBK 0301

MITH741 Creative Ambiguities: Embodiment, Text, and the Digital Humanities

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MITH610; or permission of instructor.

Asks what theoretical and applied research emerges out of the space of digital humanities and the performing arts. It will equip students with a nuanced overview of the history of the digital within performance and explore various technical approaches that can enable the exploration of intersections of research and practice, the connections between creation and research, and yes, even "cool" performance. A final project will take the place of a final Exam. Students of all disciplines and skills (STEM and ARHU) are welcome, and encouraged to join the journey.

Also offered as THET669T and DANC698T. Credit only granted for MITH741, THET669T, or DANC698T.

0101	Susan Wiesner Tu 2:00pm - 4:50pm	Seats (Total: 20) HBK 3101	

MLAW MPower Undergraduate Law Programs Spring 2019

MLAW150 **Law in a Just Society**

Credits: 3 Grading Method: Regular

Restriction: Must be in the College Park Scholars - Justice and Legal Thought program.

An exploration of the theoretical questions relating to such fundamental questions of jurisprudence as "what is law?" and "how can law be deployed as both an enemy and ally of justice?

0101	David Gray, Brian Sarginger MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 25) CCC 1100 CCC 1200	 Discussion
0102	Brian Sarginger, David Gray MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 25) CCC 1100 CCC 1200	 Discussion
0103	Brian Sarginger, David Gray MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 25) CCC 1100 CCC 1200	 Discussion

MLAW305 **Law and Legal Institutions in Social Context**

Credits: 3 Grading Method: Regular

Prerequisite: MLAW304. Restriction: Must be a student in the Law and Society Minor.

An exploration of case law, statutes, and regulations separately and together in their social context.

An analysis of the legal institutions of law through a social lens focusing on judicial interpretation, case law, statutes and regulations.

0101	William Mundy TuTh 11:00am - 12:15pm	Seats (Total: 75) SQH 1120	

MLAW358J **Selected Topics in Law and Society; Critical Issues in Health Care**

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

Students will examine the policy, legal and ethical components of a number of critical issues in health care delivery. A variety of teaching techniques, including case studies, reading and discussion of classic literature, role plays, and audiovisual clips will be used to explore such topics as the professional/patient or client relationship, professional discipline by licensing boards, medical malpractice, rights of patients to refuse treatment and demand treatment, ethical issues in human subjects research, informed consent and substituted consent in medical decision making, health care reform and regulation of various aspects of the health care system.

0101	Diane Hoffmann	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	PLS 1129

MLAW358K **Selected Topics in Law and Society; The Modern Death Penalty**

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

0101	Lee Kovarsky	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	LEF 1221

MLAW358Q **Selected Topics in Law and Society; Can Your Brain Turn You In? Brain Reading, Mental Privacy and the Law**

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

Restriction: Must be in the Law and Society minor or gain permission from MLaw Programs. This course will first introduce several brain imaging technologies, with a focus on functional magnetic resonance imaging (fMRI) and electroencephalogram (EEG). It then will look at legal uses of lie detection, pain and emotion detection, neuropredictions of dangerousness and other future behavior, and uses of brain reading in commercial and employment applications. The goals of this course are to introduce students to brain imaging technologies and brain anatomy, and to legal doctrines that permit and limit the uses of these technologies. Its overarching aim is to enhance students abilities to be critical readers of claims about science and technology in popular media, scientific studies, and legal literature.

0101	Amanda Pustilnik	Seats (Total: 18)
	TuTh 12:30pm - 1:45pm	KEY 0124

MLAW388 **Law and Society Internship**

Credits: 1-4 Grading Method: Regular

Participation in the Law and Society Internship (LASI) offers students the opportunity to enhance their education through practical skill building in the realm of law-related professionals.

Restricted to students within the Law and Society minor.

0101	Brandee Pettus	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

MLAW404 **Law & Society Capstone: Implications of Technology on Law & Society**

Credits: 3 Grading Method: Regular

Restriction: Student must be enrolled in the Law and Society minor.

An exploration of the implications of technology on law and society from a variety of perspectives.Significant issues will be taken from contemporary scholarship and court cases.

0101	Michael Spivey	Seats (Total: 75)
	Tu 3:30pm - 6:00pm	TYD 2109

MLSC MD Language Science Ctr Spring 2019

MLSC308 **PULSAR Language Science Research Seminar**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Research seminar for students in the PULSAR language science program. Weekly presentations and discussions on diverse topics in language science research, as well as on developing research skills.

Restriction: Must be in PULSAR program or have permission of the instructor. Repeatable to 4 credits. Credit only granted for: BSOS338P or MLSC308. Formerly: BSOS388P.

0101	Tess Wood	Seats (Total: 25)
	Contact instructor or department for details.	

MUED Music Education Spring 2019

MUED155 **Fundamentals for the Classroom Teacher**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in one of the following programs (Early Childhood Education; Elementary Education) ; or must be a Pre-Elementary Education major; or must be a Pre-Early Childhood Education major.

The fundamentals of music theory and practice, related to the needs of the classroom and the kindergarten teacher.

0101	Grace Chris	Seats (Total: 25)
	MW 4:15pm - 5:30pm	PAC 2168

MUED187 **Pre-Professional Experiences II**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUED186. Restriction: Must be in Music Education program.

Regular on-site school visitation at elementary, middle and high school levels arranged to expand student understandings and reflections of music instruction in classroom settings.

0101	Yo-Jung Han	Seats (Total: 25)
	F 2:00pm - 2:50pm	PAC 2540

MUED216 **Percussion Technique and Pedagogy**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Music Education program.

Playing experience on percussion instruments. Historical and acoustical background. Scoring for percussion. Principles of improvisation. Basic concepts of teaching. Methods and materials. Techniques of individual and class instruction.

0101	Lee Hinkle	Seats (Total: 15)
	MWF 8:00am - 8:50am	PAC 2540

MUED217 **Brass Instrument Technique and Pedagogy**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Music Education program.

Playing experience on instruments of the brass family. Historical and acoustical background. Principles of improvisation. Basic concepts of teaching. Methods and materials. Techniques of individual and class instruction.

0101	Michael Hewitt	Seats (Total: 15)
	MWF 10:00am - 10:50am	PAC 2540

MUED222 **Classroom Instruments Technique and Pedagogy**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUED187 and MUED186. Restriction: Must be in Music Education program.

An introduction to the fundamentals of classroom instruments technique and pedagogy for the choral and general teacher.

0101	Yo-Jung Han	Seats (Total: 15)
	W 12:00pm - 1:50pm	PAC 2130A

MUED311 **Teaching Elementary Instrumental Music I**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUED187. Restriction: Must be in Music Education program.

Prepare instrumental-emphasis music education majors to synthesize the knowledge and skills that will enable them to teach fundamental musical skills at the elementary level.

0101	Michael Hewitt	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	PAC 2540

MUED411 **Teaching Elementary Instrumental Music II**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: MUED320 and MUED311. Restriction: Must be in Music Education program.

Prepare instrumental-emphasis music education majors to synthesize the knowledge and skills that will enable them to develop and/or maintain an exemplary curricular-oriented, research-based, comprehensive elementary instrumental music program.

0101	Stephanie Prichard	Seats (Total: 15)	
	Tu 10:45am - 12:00pm Th 8:00am - 12:00pm	PAC 2130A Location: TBA	Lab

MUED472 **Teaching Choral Music**

(Perm req)

Credits: 4 | Grading Method: Regular, Audit | General Education: DSSP

Prerequisite: MUED471. Restriction: Must be in Music Education program.

Preparation for teaching choral classes through the integration of conducting technique, vocal pedagogy, knowledge of repertoire, and the application of appropriate instructional strategies in the context of peer teaching and field experience assignments.

0101	Kenneth Elpus W 4:00pm - 6:30pm Th 8:00am - 12:00pm	Seats (Total: 15) PAC 2130A Location: TBA	 Lab

MUED473 **Teaching General Music for Instrumentalists**

(Perm req)

Credits: 2 | Grading Method: Regular

Prerequisite: MUED311; and MUED320. Restriction: Must be in Music Education program.

Introduction to current trends, materials and approaches in general music instruction.

0101	Yo-Jung Han Tu 9:00am - 10:40am	Seats (Total: 20) PAC 2130A

MUED474 **Field Experiences: Pre-Student Teaching**

(Perm req)

Credits: 2 | Grading Method: Regular

Prerequisite: MUED420 and MUED411; or (MUED472 and MUED471). Restriction: Permission of ARHU-School of Music department; and senior standing.

Field experiences to fulfill teaching requirements in K-12 music teache education program.

0101	Adam Grise TBA	Seats (Total: 15) PAC 2130A

MUED484 **Student Teaching in Elementary School: Music**

(Perm req)

Credits: 6 | Grading Method: Sat-Fail

Corequisite: MUED494. Restriction: Permission of ARHU-School of Music department; and must be in Music Education program.

Fulfills elementary teaching requirements in K-12 music teacher education program. Limited to music education majors who have previously applied.

0101	Dana Varona	Seats (Total: 15)
	Contact instructor or department for details.	

MUED494 **Student Teaching in Secondary School: Music**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Corequisite: MUED484. Restriction: Permission of ARHU-School of Music department; and must be in Music Education program.

Fulfill secondary teaching requirements in K-12 music teacher education program. Limited to music education majors who have previously applied.

Students must pay a $750.00 student teaching fee.

0101	Dana Varona	Seats (Total: 15)
	Contact instructor or department for details.	

MUED697 **Curriculum & Assessment in Music Education**

(Perm req)

Credits: 3 Grading Method: Regular

Theoretical and practical knowledge related to curriculum,assessment, and evaluation in music education. Course topics include: a) aspects of philosophy,sequencing, and design in music curricula; b) reliability, validity, and fairness in assessment; c) planning for and designing assessment of student knowledge and skills; d) policy, procedures, and outcomes associated with music teacher evaluation.

0101	Stephanie Prichard	Seats (Total: 10)
	M 1:00pm - 3:30pm	PAC 2130A

MUED729 **Doctoral Colloquium in Music Education**

(Perm req)

Credits: 1 Grading Method: Sat-Fail, Audit

For students in PhD Progam in Music Education. Meets approximately 4-5 times per semester to read and discuss current work in the field, interact with visiting speakers, share work in progress, learn new tools and methods, and hear research presentations from one another

0101	Kenneth Elpus	Seats (Total: 10)
	TBA	PAC 2130A

MUSC School of Music Spring 2019

MUSC001 **MUSP Course Evaluation**

(Perm req)

Credits: 0 Grading Method:

Contact department for information to register for this course.

MUSC099 **Performance Attendance**

Credits: 0 Grading Method: Sat-Fail

Performance attendance laboratory for undergraduate music majors.

0101	Luke Spence	Seats (Total: 150)
	Contact instructor or department for details.	

MUSC102B **Class Piano**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Functional piano training for beginners. Development of techniques for school and community playing. Basic piano techniques; chord, arpeggio and scale techniques; melody and song playing; simple accompaniments, improvisation for accompaniments and rhythms; sight reading and transposition and playing by ear.

0101	Natnaree Suwanpotipra	Seats (Total: 14)
	TuTh 9:30am - 10:45am	PAC 1123

MUSC103 **Beginning Class Piano II**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: MUSC102; or permission of ARHU-School of Music department.

Functional piano training for beginners. Development of techniques useful for school and community playing. Basic piano techniques; chord, arpeggio, and scale techniques; melody and song playing; simple accompaniments, improvisation for accompaniments and rhythms; sight reading and transposition, and playing by ear. MUSC 103 is a continuation of MUSC 102; elementary repertoire is begun.

Limited to music majors.

0101	Natnaree Suwanpotipra	Seats (Total: 14)
	TuTh 11:00am - 12:15pm	PAC 1123
0201	Hui How	Seats (Total: 14)
	MWF 11:00am - 11:50am	PAC 1123

0301	Jungyeon Yim MWF 1:00pm - 1:50pm	Seats (Total: 14) PAC 1123

MUSC106 **Beginning Classical Guitar**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Introduction to classical guitar notation, technique, literature and performance. No previous musical experience required.

0101	Gerard Kunkel MW 11:00am - 11:50am	Seats (Total: 12) PAC 1230

MUSC126 **Vocal Diction: English and Latin**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Music department.

Augmentation of private voice study. Phonetics and diction for singers of English and Latin vocal literature.

0101	Diba Alvi TuTh 11:00am - 11:50am	Seats (Total: 15) PAC 3164

MUSC128 **Sight Reading For Pianists**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

A course to give the piano major an opportunity to develop proficiency in sight reading at the keyboard.

0101	Jungyeon Yim MW 10:00am - 10:50am	Seats (Total: 10) PAC 2201

MUSC129A **Ensemble; Chamber Strings**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Contact instructor to make arrangements. For Music majors only.

0101	David Salness TuTh 11:00am - 12:15pm	Seats (Total: 45) PAC 2201	 Lab

MUSC129B **Ensemble; Chamber Woodwinds**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Contact instructor to make arrangements. For Music majors only.

0101	Mark Hill TuTh 11:00am - 12:15pm	Seats (Total: 40) PAC 2201	 Lab
0901	Instructor: TBA TuTh 11:00am - 12:15pm	Seats (Total: 10) PAC 2201	 Lab
1001	Instructor: TBA TuTh 11:00am - 12:15pm	Seats (Total: 10) PAC 2201	 Lab
1101	Instructor: TBA TuTh 11:00am - 12:15pm	Seats (Total: 10) PAC 2201	 Lab
1201	Instructor: TBA TuTh 11:00am - 12:15pm	Seats (Total: 10) PAC 2201	 Lab

MUSC129C **Ensemble; Chamber Brasses**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

For Music majors only.

0101	Gregory Miller TuTh 11:00am - 12:15pm	Seats (Total: 30) PAC 2201	 Lab

0701	Luke Spence	Seats (Total: 10)	
	TuTh 11:00am - 12:15pm	Location: TBA	Lab

MUSC129G **Ensemble; Balinese Gamelan**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	I Suadin	Seats (Total: 20)	
	Th 7:00pm - 8:30pm	PAC 1230	Lab

MUSC129K **Ensemble; Japanese Koto**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Kyoko Okamoto	Seats (Total: 10)	
	Tu 5:30pm - 7:00pm	PAC 3160	Lab

MUSC129L **Ensemble; Advanced Japanese Koto**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Prerequisite: Contact instructor to make arrangements.

0101	Kyoko Okamoto	Seats (Total: 4)	
	Tu 7:00pm - 8:30pm	PAC 3160	Lab

MUSC129P **Ensemble; Percussion**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Lee Hinkle	Seats (Total: 15)	
	F 3:30pm - 6:00pm	PAC 2540	Lab
	W 5:00pm - 7:00pm	PAC 2540	Lab

MUSC129Q **Ensemble; Korean Percussion Ensemble**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Sebastian Wang	Seats (Total: 17)	
	Th 7:00pm - 8:30pm	PAC 2170	Lab

MUSC130 **Survey of Music Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA General Education: DSHU

Restriction: Must not be in any of the following programs (Music (Professional Program); Music Education).

A study of the principles upon which music is based, and an introduction to the musical repertory performed in America today.

0101	William Robin	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	BPS 1250	
	F 9:00am - 9:50am	PAC 3160	Discussion
0102	William Robin	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	BPS 1250	
	F 10:00am - 10:50am	PAC 3160	Discussion
0103	William Robin	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	BPS 1250	
	F 11:00am - 11:50am	PAC 3160	Discussion

0104	William Robin MW 1:00pm - 1:50pm F 9:00am - 9:50am	Seats (Total: 25) BPS 1250 PAC 3164	Discussion
0105	William Robin MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 25) BPS 1250 PAC 3164	Discussion
0106	William Robin MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 25) BPS 1250 PAC 3164	Discussion

MUSC140 **Music Fundamentals I**

Credits: 3 | Grading Method: Regular, Audit | CORE: HA | General Education: DSSP

Restriction: Must not be in any of the following programs (Music (Professional Program); Music Education).

Introductory theory course. Notation, scales, intervals, triads, rhythm, form and basic aural skills.

0101	John Boatright MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 13) PAC 2168 PAC 1108	Discussion
0102	John Boatright MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 12) PAC 2168 PAC 1108	Discussion
0201	John Boatright MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 13) PAC 2168 PAC 1108	Discussion
0202	John Boatright MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 12) PAC 2168 PAC 1108	Discussion

MUSC151 **Theory of Music II**

(Perm req)

Credits: 3 | Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in MUSC150.

A continuation of MUSC150, including study of more advanced harmonic techniques of the eighteenth century, such as modulation and chromatic harmonies. Emphasis on sight singing, ear training, analysis and compositional skills.

0101	Richard Layton MWF 8:00am - 8:50am TuTh 8:25am - 9:15am	Seats (Total: 6) PAC 2160 PAC 2160	 Lab
0102	Richard Layton MWF 8:00am - 8:50am TuTh 9:30am - 10:20am	Seats (Total: 6) PAC 2160 PAC 2160	 Lab
0201	Richard Layton MWF 9:00am - 9:50am TuTh 8:25am - 9:15am	Seats (Total: 6) PAC 2160 PAC 2164	 Lab
0202	Richard Layton MWF 9:00am - 9:50am TuTh 8:25am - 9:15am	Seats (Total: 6) PAC 2160 PAC 2168	 Lab
0301	Michael Fili MWF 10:00am - 10:50am TuTh 9:30am - 10:20am	Seats (Total: 6) PAC 2160 PAC 2164	 Lab
0302	Michael Fili MWF 10:00am - 10:50am TuTh 9:30am - 10:20am	Seats (Total: 6) PAC 2160 PAC 2168	 Lab
0401	Michael Oberhauser MWF 8:00am - 8:50am TuTh 8:25am - 9:15am	Seats (Total: 8) PAC 3168 PAC 3160	 Lab
0402	Michael Oberhauser MWF 8:00am - 8:50am TuTh 9:30am - 10:20am	Seats (Total: 8) PAC 3168 PAC 3160	 Lab

MUSC203 **Intermediate Class Piano II**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSC202; or must have equivalent piano training.

Advanced keyboard techniques. Continuation of skills introduced in MUSC202. Transposition, modulation and sight reading; methods of teaching functional piano. Development of style in playing accompaniments and in playing for community singing. More advanced repertory.

0101	Hui How MWF 9:00am - 9:50am	Seats (Total: 10) PAC 1123	

MUSC205 **History of Popular Music, 1950-Present**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA | General Education: DSHU

A historical survey of rock music (blues, rock, soul, metal, rap, etc.) from circa 1950 to the present, with emphasis on popular music as music and popular music as social history.

0101	Nicole Powlison MW 12:00pm - 12:50pm F 9:00am - 9:50am	Seats (Total: 23) ARC 0204 PAC 2168	Discussion
0102	Nicole Powlison MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 23) ARC 0204 PAC 2168	Discussion
0103	Nicole Powlison MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 24) ARC 0204 PAC 2168	Discussion
0104	Nicole Powlison MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 23) ARC 0204 PAC 2168	Discussion
0105	Nicole Powlison MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 23) ARC 0204 PAC 2168	Discussion
0106	Nicole Powlison MW 12:00pm - 12:50pm F 2:00pm - 2:50pm	Seats (Total: 24) ARC 0204 PAC 2168	Discussion
0107	Nicole Powlison MW 12:00pm - 12:50pm F 9:00am - 9:50am	Seats (Total: 23) ARC 0204 PAC 2164	Discussion

0108	Nicole Powlison MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 23) ARC 0204 PAC 2164	Discussion
0109	Nicole Powlison MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 24) ARC 0204 PAC 2164	Discussion
0110	Nicole Powlison MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 23) ARC 0204 PAC 2164	Discussion
0111	Nicole Powlison MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 23) ARC 0204 PAC 2164	Discussion
0112	Nicole Powlison MW 12:00pm - 12:50pm F 2:00pm - 2:50pm	Seats (Total: 24) ARC 0204 PAC 2164	Discussion

MUSC210 **The Impact of Music on Life**

Credits: 3 Grading Method: Regular CORE: HA, D General Education: DSHU, DVUP

Credit only granted for: MUET210 or MUSC210. Formerly: MUET210.

Music as a part of culture. Materials drawn from traditions throughout the globe to illustrate issues of historical and contemporary significance, including the impact of race, class and gender on the study of music.

0101	Fernando Rios MW 1:00pm - 1:50pm F 9:00am - 9:50am	Seats (Total: 25) ARC 0204 PAC 3168	Discussion
0102	Fernando Rios MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 25) ARC 0204 PAC 3168	Discussion
0103	Fernando Rios MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 25) ARC 0204 PAC 3168	Discussion

0104	Fernando Rios MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	Seats (Total: 25) ARC 0204 PAC 3168	Discussion
0105	Fernando Rios MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ARC 0204 PAC 3168	Discussion
0106	Fernando Rios MW 1:00pm - 1:50pm F 2:00pm - 2:50pm	Seats (Total: 25) ARC 0204 PAC 3168	Discussion
0107	Fernando Rios MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	Seats (Total: 25) ARC 0204 PAC 3164	Discussion
0108	Fernando Rios MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ARC 0204 PAC 3164	Discussion
0109	Fernando Rios MW 1:00pm - 1:50pm F 2:00pm - 2:50pm	Seats (Total: 25) ARC 0204 PAC 3164	Discussion
0110	Fernando Rios MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 25) ARC 0204 HBK 1108	Discussion
0111	Fernando Rios MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	Seats (Total: 25) ARC 0204 HBK 1108	Discussion
0112	Fernando Rios MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 25) ARC 0204 HBK 1108	Discussion

MUSC215 **World Popular Musics and Identity**

Credits: 3 | Grading Method: Regular, Audit | CORE: HA, D | General Education: DSHU, DVUP

Credit only granted for: MUET200 or MUSC215. Formerly: MUET200.

Focus on popular musics in different cultures with an emphasis on cross-cultural comparisons and analysis of how musics and identity intersect.

0101	Laura Schnitker MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 25) LEF 2205 PAC 1809	Discussion
0102	Laura Schnitker MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 25) LEF 2205 PAC 1809	Discussion
0103	Laura Schnitker MW 12:00pm - 12:50pm F 2:00pm - 2:50pm	Seats (Total: 25) LEF 2205 PAC 1809	Discussion
0104	Laura Schnitker MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 25) LEF 2205 JMP 1202	Discussion
0105	Laura Schnitker MW 12:00pm - 12:50pm F 2:00pm - 2:50pm	Seats (Total: 25) LEF 2205 JMP 1202	Discussion
0106	Laura Schnitker MW 12:00pm - 12:50pm F 3:00pm - 3:50pm	Seats (Total: 25) LEF 2205 JMP 1202	Discussion
0107	Laura Schnitker MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 25) LEF 2205 PAC 1809	Discussion
0108	Laura Schnitker MW 12:00pm - 12:50pm F 9:00am - 9:50am	Seats (Total: 25) LEF 2205 PAC 1809	Discussion
0109	Laura Schnitker MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 25) LEF 2205 PAC 1809	Discussion

MUSC220 Selected Musical Cultures of the World

Credits: 3 | Grading Method: Regular | CORE: HA, D | General Education: DSHU, DVUP

Credit only granted for: MUET220 or MUSC220. Formerly: MUET220.

A survey of selected musical cultures of the world, such as India, Japan, China, Indonesia, West Africa, Eastern Europe and the Near East.

0101	Siv Lie MW 9:00am - 9:50am F 12:00pm - 12:50pm	Seats (Total: 25) PAC 2200 PAC 3160	Discussion
0102	Siv Lie MW 9:00am - 9:50am F 1:00pm - 1:50pm	Seats (Total: 25) PAC 2200 PAC 3160	Discussion
0103	Siv Lie MW 9:00am - 9:50am F 2:00pm - 2:50pm	Seats (Total: 25) PAC 2200 PAC 3160	Discussion

MUSC226 **Vocal Diction: French**

(Perm req)

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Music department. Restriction: Must be in a major within ARHU-School of Music department.

Augmentation of private voice study. Phonetics and diction for singers of French vocal literature.

0101	Diba Alvi TuTh 2:00pm - 2:50pm	Seats (Total: 20) PAC 2164

MUSC228 **Introduction to Accompanying for Pianists**

(Perm req)

Credits: 2 | Grading Method: Regular, Pass-Fail, Audit

A course to introduce the piano major to accompanying at an intermediat level of difficulty. Class instruction will center on rehearsal and coaching geared toward performance, and will be supplemented by experience working as an accompanist in voice classes or applied studios.

0101	Robert McReynolds Tu 4:00pm - 6:00pm	Seats (Total: 10) PAC 2126

MUSC229A **Ensemble; Symphony Orchestra**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted. Contact instructor to make arrangements.

0101	Jose-Luis Novo	Seats (Total: 70)	
	TuTh 3:30pm - 6:30pm	PAC 1230	Lab

MUSC229D **Ensemble; Wind Orchestra**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Open by audition. Contact instructor to make arrangements.

0101	Michael Votta	Seats (Total: 50)	
	TuTh 3:30pm - 6:30pm	PAC 2540	Lab

MUSC229E **Ensemble; Wind Ensemble**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Open by audition. Contact instructor to make arrangements.

0101	Andrea Brown	Seats (Total: 75)	
	MWF 11:00am - 12:30pm	PAC 2540	Lab

MUSC229G **Ensemble; Marching Band Repertoire**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Andrea Brown	Seats (Total: 60)	
	Th 7:00pm - 10:00pm	PAC 2540	

MUSC229J **Ensemble; Jazz Ensemble**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted. Contact instructor to make arrangements.

0101	Timothy Powell	Seats (Total: 25)	
	MW 5:30pm - 7:15pm	PAC 1230	Lab
0201	Timothy Powell	Seats (Total: 30)	
	MW 1:00pm - 2:15pm	PAC 1230	Lab
0301	Timothy Powell	Seats (Total: 35)	
	M 7:30pm - 9:30pm	PAC 1230	Lab

MUSC229P **Ensemble; Pep Band**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Andrea Brown	Seats (Total: 165)
	Contact instructor or department for details.	

MUSC229R **Ensemble; Repertoire Orchestra**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted. Contact instructor to make arrangements.

0101	Tiffany Lu	Seats (Total: 50)	
	MW 3:00pm - 5:00pm	PAC 1230	Lab

MUSC229U **Ensemble; University Band**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Open by audition. Contact instructor to make arrangements.

0101	Craig Potter	Seats (Total: 150)	
	W 7:30pm - 9:30pm	PAC 2540	Lab

MUSC229Z **Ensemble; Jazz Combo**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted. Contact instructor to make arrangements.

0101	Gerard Kunkel	Seats (Total: 5)
	Contact instructor or department for details.	
0201	Thomas Baldwin	Seats (Total: 5)
	Contact instructor or department for details.	
0301	Michael Quinlivan	Seats (Total: 10)
	Contact instructor or department for details.	
0401	Michael Kuhl	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC248D **Selected Topics in Music; Analysis of Hip Hop Music**

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Designed to allow a student of theory or music history to pursue a specialized topic or project under the supervision of a faculty member.

0101	William Evans M 2:00pm - 3:15pm	Seats (Total: 12) PAC 2164	

MUSC251 **Advanced Theory of Music II**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Prerequisite: Minimum grade of C- in MUSC250.

A continuation of MUSC250, concentrating on late nineteenth-century chromatic harmony and an introduction to twentieth-century melody and harmony. Emphasis on sight singing, ear training, analysis and compositional skills.

0101	Thomas DeLio TuTh 8:00am - 9:15am MW 9:00am - 9:50am	Seats (Total: 6) PAC 3164 PAC 3164	 Lab
0102	Thomas DeLio TuTh 8:00am - 9:15am MW 10:00am - 10:50am	Seats (Total: 6) PAC 3164 PAC 3164	 Lab
0201	Thomas DeLio TuTh 9:30am - 10:45am MW 9:00am - 9:50am	Seats (Total: 6) PAC 3164 PAC 2164	 Lab
0202	Thomas DeLio TuTh 9:30am - 10:45am MW 9:00am - 9:50am	Seats (Total: 6) PAC 3164 PAC 2168	 Lab
0301	Jared Kenlon TuTh 2:00pm - 3:15pm MW 10:00am - 10:50am	Seats (Total: 6) PAC 3168 PAC 2164	 Lab
0302	Jared Kenlon TuTh 2:00pm - 3:15pm MW 10:00am - 10:50am	Seats (Total: 6) PAC 3168 PAC 2168	 Lab

MUSC269F **Special Topics in Study Abroad II; Exploring Music and Society: Flamenco**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

MUSC269M **Special Topics in Study Abroad II; Czech Music**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

MUSC289I **Exploring the Power of Musical Performance in Social Engagement**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA, D General Education: DSHU, DVUP, SCIS

0101	Lee Hinkle TuTh 9:30am - 10:45am	Seats (Total: 60) PAC 2200	

MUSC320 **Music History II**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSC310; and permission of ARHU-School of Music department. Credit only granted for: MUSC230 or MUSC320. Formerly: MUSC230.

A historical study of Western music from 1600 to 1800.

0101	Barbara Haggh-Huglo MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) PAC 2200 PAC 2160	Discussion
0102	Barbara Haggh-Huglo MW 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 25) PAC 2200 PAC 2160	Discussion
0103	Barbara Haggh-Huglo MW 2:00pm - 2:50pm F 3:00pm - 3:50pm	Seats (Total: 25) PAC 2200 PAC 2160	Discussion

MUSC329A **Ensemble; University of Maryland Chorale**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted. Contact instructor to make arrangements.

0101	Jonathan King, Minji Kim	Seats (Total: 80)	
	TuTh 4:30pm - 6:00pm	PAC 2201	Lab

MUSC329B **Ensemble; Chamber Singers**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted. Contact instructor to make arrangements.

0101	Aaron Peisner, Edward Maclary	Seats (Total: 50)	
	MW 3:00pm - 3:50pm	PAC 2201	
	TuTh 3:30pm - 4:20pm	PAC 2201	

MUSC329E **Ensemble; Gospel Choir**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Anne Carswell	Seats (Total: 60)	
	Th 7:00pm - 10:00pm	PAC 2201	Lab

MUSC329M **Ensemble; Men's Chorus**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Timothy Keeler	Seats (Total: 40)	
	MWF 12:00pm - 12:50pm	PAC 1230	

MUSC329O **Ensemble; Opera Chorus**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Jonathan King	Seats (Total: 30)	
	F 4:00pm - 6:00pm	PAC 2170	Lab

MUSC329W **Ensemble; Treble Choir**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Kenneth Elpus	Seats (Total: 60)	
	MWF 12:00pm - 12:50pm	PAC 2201	

MUSC369M **Special Topics in Study Abroad III; Masterpieces of Italian Opera**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

MUSC379 **Opera Workshop**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail

Open to music and non-music majors (by audition). Operatic production and performance, performance techniques and coaching, stage direction, set design, costume design and make-up. Repertory will include smaller operatic works, excerpts or scenes.

0101	Amanda Consol MW 4:00pm - 6:00pm	Seats (Total: 15) PAC 2170

MUSC386 **Experiential Learning**

(Perm req)

Credits: 6 Grading Method: Regular, Pass-Fail

Prerequisite: Permission of ARHU-School of Music department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

MUSC388 **Music Internship**

(Perm req)

Credits: 3 Grading Method: Regular

Pre-professional field work in music.

Prerequisite: permission of instructor.

0101	Lori DeBoy Contact instructor or department for details.	Seats (Total: 5)
0201	Michael Votta Contact instructor or department for details.	Seats (Total: 5)
0301	Edward Maclary Contact instructor or department for details.	Seats (Total: 5)
0401	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

MUSC389 **Music Internship Analysis**

(Perm req)

Credits: 1 Grading Method: Regular

Documentation and evaluation of field work experience.

0101	Lori DeBoy Contact instructor or department for details.	Seats (Total: 5)
0201	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0301	Edward Maclary Contact instructor or department for details.	Seats (Total: 5)

0401	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

MUSC400S **Music Pedagogy**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: MUSP315; and permission of ARHU-School of Music department.

Conference course. A study of major pedagogical treatises in music, and an evaluation of pedagogical techniques, materials, and procedures.

Contact department for information to register for this course.

MUSC400V **Music Pedagogy**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSP315; and permission of ARHU-School of Music department.

Conference course. A study of major pedagogical treatises in music, and an evaluation of pedagogical techniques, materials, and procedures.

0101	Diba Alvi	Seats (Total: 25)
	TuTh 9:30am - 10:45am	PAC 2201

MUSC436 **Jazz: Then and Now**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Major styles and influential artists of the past 75 years of jazz.

0101	John Morgan	Seats (Total: 20)
	MW 4:15pm - 5:30pm	PAC 3160

MUSC438L **Area Studies in Ethnomusicology; Latino/a Communities in the U.S.**

Credits: 3 Grading Method: Regular

Advanced study of musics in selected parts of the world.

0101	Fernando Rios	Seats (Total: 12)
	W 3:30pm - 6:00pm	PAC 3110A

MUSC444 **Wind and Percussion Literature**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Music department. Corequisite: MUSP420 or MUSP419.

Recital program notes and written projects in wind or percussion literature.

Contact department for information to register for this course.

MUSC445 **Survey of the Opera**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSC330 and MUSC331; or students who have taken courses with comparable content may contact the department.

A study of the music, librettos and composers of the standard operas.

0101	Olga Haldey	Seats (Total: 25)
	M 3:30pm - 6:00pm	PAC 2160

MUSC446 **String Literature**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSP316; and permission of ARHU-School of Music department.

Recital program notes and written projects in string literature.

Contact department for information to register for this course.

MUSC448 **Selected Topics in Music**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

MUSC448A **Selected Topics in Music; Accompanying Practicum**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

0101	Mayron Tsong	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC448C **Selected Topics in Music; Advanced Analytical Techniques II**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

0101	Daniel Zimmerman TuTh 11:00am - 12:15pm	Seats (Total: 8) PAC 3160

MUSC448F **Selected Topics in Music; Style Analysis**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

0101	David Froom W 5:30pm - 8:00pm	Seats (Total: 15) PAC 2164

MUSC448G **Selected Topics in Music; History of the Mass-Machaut to Bernstein**

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

0101	Barbara Haggh-Huglo TuTh 9:30am - 10:45am	Seats (Total: 12) PAC 3110A

MUSC448W **Selected Topics in Music; Instrumental Pedagogy**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSC450 **Musical Form**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSC251.

A study of the principles of organization in music with emphasis on eighteenth and nineteenth century European music. Reading and analysis of scores exemplifying the musical forms.

0101	Michael Oberhauser TuTh 2:00pm - 3:15pm	Seats (Total: 25) PAC 2168

MUSC454 **Jazz Improvisation II**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSC453; or students who have taken courses with comparable content may contact the department. And permission of ARHU-School of Music department. Credit only granted for: MUSC346 or MUSC454. Formerly: MUSC346.

Continuation of MUSC453 including scoring and transcription.

0101	Gerard Kunkel Th 12:30pm - 3:00pm	Seats (Total: 5) PAC 1208

MUSC456 **Jazz Arranging**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MUSC455; and permission of ARHU-School of Music department. Credit only granted for: MUSC448N or MUSC456. Formerly: MUSC448N.

A comprehensive approach to jazz arranging. Topics to include chord scale theory, voicing techniques, part and score layout, and formal construction of an arrangement.

0101	Timothy Powell TuTh 3:30pm - 4:45pm	Seats (Total: 12) PAC 2168

MUSC463 **Technology and a Career in Music**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Recommended: Ability to read music on a grand staff (treble and bass clef). Additional information: No previous experience with technology is required.

A hands-on introduction to technology as it applies to music creation and recording. Digital audio workstations, music notation software, and cloud-based music technology are used to create and manipulate musical examples with an eye toward their practical applications for professional musicians.

0101	Jared Kenlon W 1:00pm - 3:30pm	Seats (Total: 18) PAC 1108

MUSC469F **Orchestral Excerpts for String Players; Bass**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Robert Oppelt M 6:00pm - 7:15pm	Seats (Total: 15) Location: TBA

MUSC469V **Orchestral Excerpts for String Players; HARP**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Sarah Fuller Contact instructor or department for details.	Seats (Total: 15)

MUSC490 **Conducting**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: MUSC251.

Vocal and instrumental baton techniques.

0101	Edward Maclary MWF 11:00am - 11:50am	Seats (Total: 12) PAC 2201
0201	Edward Maclary MWF 1:00pm - 1:50pm	Seats (Total: 12) PAC 2201

MUSC491 **Conducting II**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: MUSC490; or students who have taken courses with comparable content may contact the department.

Baton techniques applied to score reading, rehearsal techniques, tone production, style and interpretation.

Concurrent registration in MUED472.

0101	Joseph Scott MW 9:00am - 9:50am	Seats (Total: 20) PAC 2540
0201	Aaron Peisner, Edward Maclary MW 9:00am - 9:50am	Seats (Total: 20) PAC 2201

MUSC499 **Independent Studies**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Independent research on a topic chosen in consultation with the instructor, which may culminate in a paper or appropriate project.

Contact department for information to register for this course.

MUSC602 **Advanced Italian Lyric Diction**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Restriction: Must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)) . And permission of instructor; or admission to graduate voice program.

Concepts, strategies and techniques for singing operatic and song literature in Italian: syllabification, vowels, stressed and unstressed syllables, dipthongs, glides and elisions, single and double consonants with emphasis on current performance practices.

0101	Kevin Short	Seats (Total: 15)
	Tu 10:30am - 12:00pm	PAC 1218

MUSC603 **Advanced German Lyric Diction**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Restriction: Must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)) . And permission of instructor; or admission to graduate voice program.

Concepts, strategies and techniques for singing operatic and song literature in German: single and double consonants, the use of the glottal, the German closed (e) and (o) vowels, the "schwa" and consonant clusters. Mastery of the International Phonetic Alphabet (IPA) as it applies to "Hochdeutsch" will be expected.

0101	Delores Ziegler	Seats (Total: 15)
	Tu 10:30am - 12:00pm	PAC 2170

MUSC606 **Opera Repertory II**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Prerequisite: MUSC605; or permission of instructor. Restriction: Must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)).

Continuation of MUSC 605. Advanced vocal coaching of selections from th Italian, French, German and English opera repertory: musical accuracy, language facility; diction clarity; and dramatic interpretation.

0101	Carmen Balthrop	Seats (Total: 10)	
	Th 10:30am - 12:00pm	TWS 1121	Lab

MUSC608 **Chamber Music Repertory; Chamber Music Repertoire**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Prerequisite: graduate standing as a major in performance. A study, through performance, of diversified chamber music for standard media.

Contact department for information to register for this course.

MUSC609 **Piano Chamber Music Practicum and Analysis**

(Perm req)

Credits: 2 Grading Method: Regular

Study of repertoire written for piano in duos or with several instruments, to develop an accompanists advanced performance skills in listening, balance, nuance in dynamics, harmonic motion and phrasing.

0101	Rita Sloan	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC612 **Opera Techniques II**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: Minimum grade of B- in MUSC611. Corequisite: MUSC602. Restriction: Must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)) ; and permission of Director of Opera required.

Continuation of MUSC 611. Techniques for opera performance: Scene Study II; Movement II; and Mask.

0101	Craig Kier	Seats (Total: 20)	
	TBA	PAC 2170	
	TBA	PAC 1218	Lab

MUSC614 **Opera Techniques IV**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Prerequisite: Minimum grade of B- in MUSC613. Corequisite: MUSC606 and MUSC604. Restriction: Must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)) ; and permission of Director of Opera required.

Continuation of MUSC 613. Techniques for opera performance: Scene Study IV and Movement IV.

0101	Craig Kier	Seats (Total: 20)	
	TBA	PAC 2170	
	TBA	PAC 1218	Lab

MUSC629A **Ensemble; Symphony Orchestra**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Audition required before permission of department will be granted. Contact instructor to make arrangements.

0101	Jose-Luis Novo, Mark Wakefield	Seats (Total: 50)	
	TuTh 3:30pm - 6:30pm	PAC 1230	Lab

MUSC629C **Ensemble; Wind Ensemble**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Michael Votta	Seats (Total: 20)	
	MWF 11:00am - 12:30pm	PAC 2540	Lab

MUSC629G **Ensemble; Balinese Gamelan**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	I Suadin	Seats (Total: 5)	
	Th 7:00pm - 8:30pm	PAC 1230	Lab

MUSC629J **Ensemble; Jazz Ensemble**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Audition required before permission of department will be granted. Contact instructor to make arrangements.

0101	Timothy Powell	Seats (Total: 20)	
	MW 5:30pm - 7:15pm	PAC 1230	Lab
0201	Timothy Powell	Seats (Total: 5)	
	MW 1:00pm - 2:15pm	PAC 1230	Lab
0301	Timothy Powell	Seats (Total: 10)	
	M 7:30pm - 9:30pm	PAC 1230	Lab

MUSC629K **Ensemble; Japanese Koto**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Kyoko Okamoto	Seats (Total: 2)	
	Tu 5:30pm - 7:00pm	PAC 3160	Lab

MUSC629L **Ensemble; Advanced Japanese Koto**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Prerequisite: Contact instructor to make arrangements.

0101	Kyoko Okamoto	Seats (Total: 4)	
	Tu 7:00pm - 8:30pm	PAC 3160	Lab

MUSC629P **Ensemble; Percussion Ensemble**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Lee Hinkle	Seats (Total: 15)	
	F 3:30pm - 6:00pm	PAC 2540	Lab
	W 5:00pm - 7:00pm	PAC 2540	Lab

0301	Lee Hinkle	Seats (Total: 5)	
	Contact instructor or department for details.		

MUSC629Q **Ensemble; Korean Percussion Ensemble**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Sebastian Wang	Seats (Total: 5)	
	Th 7:00pm - 8:30pm	PAC 2170	Lab

MUSC629R **Ensemble; Repertoire Orchestra**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Audition required before permission of department will be granted. Contact instructor to make arrangements.

0101	Tiffany Lu	Seats (Total: 10)	
	MW 3:00pm - 5:00pm	PAC 1230	Lab

MUSC629U **Ensemble; University Band**

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Open by audition. Contact instructor to make arrangements.

0101	Instructor: TBA	Seats (Total: 10)	
	W 7:30pm - 9:30pm	PAC 2540	Lab

MUSC629W **Ensemble; Wind Orchestra**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Open by audition. Contact instructor to make arrangements.

0101	Michael Votta	Seats (Total: 30)	
	TuTh 3:30pm - 6:30pm	PAC 2540	Lab

MUSC629Z **Ensemble; Jazz Combo**

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Audition required before permission of department will be granted. Contact instructor to make arrangements.

0101	Gerard Kunkel Contact instructor or department for details.	Seats (Total: 5)
0201	Thomas Baldwin Contact instructor or department for details.	Seats (Total: 5)
0301	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0401	Leo Rayon Contact instructor or department for details.	Seats (Total: 5)

MUSC633 **Field Methods in Ethnomusicology I**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ARHU-School of Music department. Credit only granted for: MUET660 or MUSC633. Formerly: MUET660.

Introduction to a wide variety of methods and strategies for surveying, interviewing, and observing the dynamics of performance in contrasting settings. This is the first of three semesters of field methods.

0101	Siv Lie M 3:30pm - 6:00pm	Seats (Total: 12) PAC 3110A

MUSC644 **Seminar in Solo Vocal Literature II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC643; or students who have taken courses with comparable content may contact the department.

A continuation of MUSC 643 with an emphasis on areas of individual interest.

0101	Gran Wilson	Seats (Total: 10)
	W 3:00pm - 5:30pm	PAC 2200

MUSC645 **Seminar in Vocal Pedagogy**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC400; or students who have taken courses with comparable content may contact the department.

A study of the physiological, psychological and acoustical aspects of the teaching of singing combined with independent study and research in areas of individual interest.

Advanced special students require department authorization.

0101	Martha Randall	Seats (Total: 12)
	MW 9:30am - 10:45am	PAC 3168

MUSC649A **Ensemble; University of Maryland Chorale**

(Perm req)

Credits: 1 Grading Method: Regular

Audition required before permission of department will be granted. Contact instructor to make arrangements.

0101	Kathryn Hylton, Lucas Link	Seats (Total: 10)	
	TuTh 4:30pm - 6:00pm	PAC 2201	Lab

MUSC649B **Ensemble; Chamber Singers**

(Perm req)

Credits: 1 Grading Method: Regular

Audition required before permission of department will be granted. Contact instructor to make arrangements.

0101	Aaron Peisner, Edward Maclary	Seats (Total: 10)
	MW 3:00pm - 3:50pm	PAC 2201
	TuTh 3:30pm - 4:20pm	PAC 2201

MUSC649E **Ensemble; Gospel Choir**

Credits: 1 Grading Method: Regular

0101	Anne Carswell	Seats (Total: 10)	
	Th 7:00pm - 10:00pm	PAC 2201	Lab

MUSC649M **Ensemble; Men's Chorus**

Credits: 1 Grading Method: Regular

0101	Edward Maclary	Seats (Total: 10)	
	MWF 12:00pm - 12:50pm	PAC 1230	

MUSC649O **Ensemble; Opera Chorus**

(Perm req)

Credits: 1 Grading Method: Regular

0101	Edward Maclary	Seats (Total: 15)	
	F 4:00pm - 6:00pm	PAC 2170	Lab

MUSC649W **Ensemble; Treble Choir**

Credits: 1 Grading Method: Regular

0101	Kenneth Elpus	Seats (Total: 10)	
	MWF 12:00pm - 12:50pm	PAC 2201	

MUSC654 **Jazz Improvisation II**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC653. Restriction: Permission of ARHU-School of Music department. Credit only granted for: MUSC654 or MUSC699Z. Formerly: MUSC699Z.

Continuation of MUSC653, study of jazz improvisation techniques through analysis, transcription and composition.

0101	Gerard Kunkel	Seats (Total: 5)	
	Th 12:30pm - 3:00pm	PAC 1208	

MUSC656 **Jazz Arranging**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC655. Restriction: Permission of ARHU-School of Music department. Credit only granted for: MUSC656 or MUSC699N. Formerly: MUSC699N.

Comprehensive approach to jazz arranging, including chord scale theory, voicing techniques, part and score layout, and formal construction of an arrangement.

0101	Timothy Powell	Seats (Total: 12)
	TuTh 3:30pm - 4:45pm	PAC 2168

MUSC659A **Seminar in Repertoire and Pedagogy; Choral Repertoire and Pedagogy**

Credits: 2-3 Grading Method: Regular, Audit

Analysis and preparation of choral master works from all major style periods for the purpose of successful rehearsal and performance by conductors.

0101	Edward Maclary	Seats (Total: 6)
	M 4:00pm - 6:30pm	PAC 3164

MUSC659B **Seminar in Repertoire and Pedagogy; Orchestral Repertoire and Pedagogy**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Analysis and preparation of choral master works from all major style periods for the purpose of successful rehearsal and performance by conductors.

0101	Instructor: TBA	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC659C **Seminar in Repertoire and Pedagogy; Wind Repertoire and Pedagogy**

(Perm req)

Credits: 2-3 Grading Method: Regular, Audit

Analysis and preparation of choral master works from all major style periods for the purpose of successful rehearsal and performance by conductors.

0101	Michael Votta	Seats (Total: 5)
	Contact instructor or department for details.	

MUSC660 **String Pedagogy**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ARHU-School of Music department. Credit only granted for: MUSC400S or MUSC660.

A study of major string pedagogical treatises, and an evaluation of string pedagogical techniques, materials, and procedures.

0301	Sarah Fuller	Seats (Total: 5)
	Contact instructor or department for details.	

MUSC665 **Theory in Analysis**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC445; or permission of ARHU-School of Music department. Restriction: Must not have completed MUSC465. Credit only granted for: MUSC465, MUSC665, or MUSC699T. Formerly: MUSC699T.

An advanced study of the philosophy, practice, and aesthetics of music analysis in contemporary music thoery. Readings drawn from the theoretic literature from 1960 to the present emphasize standards for discourse, the objects of music analysis, rationales for interpretation, and the role that theories of musical structure play in analytic practice.

0101	Dora Hanninen	Seats (Total: 12)
	Th 2:00pm - 4:30pm	PAC 3164

MUSC669F **Orchestral Excerpts for String Players; BASS**

Credits: 1 Grading Method: Regular, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Robert Oppelt	Seats (Total: 15)
	M 6:00pm - 7:15pm	Location: TBA

MUSC669V **Orchestral Excerpts for String Players; HARP**

Credits: 1 Grading Method: Regular, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Sarah Fuller	Seats (Total: 15)
	Contact instructor or department for details.	

MUSC671 **Advanced Analytical Techniques II**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: MUSC451; or permission of ARHU-School of Music department.

Analysis of representative masterpieces of the nineteenth and early twentieth centuries.

0101	Daniel Zimmerman	Seats (Total: 12)
	TuTh 11:00am - 12:15pm	PAC 3160

MUSC673 **Style Analysis**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: MUSC251; and permission of ARHU-School of Music department. Restriction: Must not have completed MUSC448. Credit only granted for: MUSC673, MUSC448F, or MUSC699F. Formerly: MUSC699F.

An analytical study of musical style from the Middle Ages to present through analysis of selected compositions. The principle genres and composers of Medieval, Renaissance, Baroque, Classical, Romantic and 20th century music will be covered.

0101	David Froom	Seats (Total: 15)
	W 5:30pm - 8:00pm	PAC 2164

MUSC677 **Current Theory and Method in Ethnomusicology**

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of ARHU-School of Music department. Credit only granted for: MUET676 OR MUSC677. Formerly: MUET676.

Reading and discussion of major works in ethnomusicology, with emphasis on a close examination of trends in methodology and theory from approximately twenty years before the present to current work in both areas. Current work in all geographic areas will be reviewed and analyzed.

0101	John Witzleben	Seats (Total: 12)
	Th 3:30pm - 6:00pm	PAC 3110A

MUSC699 **Selected Topics in Music**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSC699C **Selected Topics in Music; New Music, New Institutions**

Credits: 3 Grading Method: Regular, Audit

0101	William Robin Tu 3:30pm - 6:00pm	Seats (Total: 12) PAC 3110A

MUSC699M **Selected Topics in Music; Perpectives on Musical Structure**

Credits: 3 Grading Method: Regular, Audit

0101	Robert Gibson M 1:00pm - 3:30pm	Seats (Total: 12) PAC 2160

MUSC699Q **Selected Topics in Music; Opera Today**

Credits: 3 Grading Method: Regular, Audit

0101	Olga Haldey W 6:30pm - 9:00pm	Seats (Total: 12) PAC 3110A

MUSC699W **Selected Topics in Music; Instrumental Pedagogy**

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSC758 **Advanced Aural Skills for Conductors**

(Perm req)

Credits: 1 Grading Method: Regular

Continuation of MUSC757, advanced aural skills necessary for conductors.

0101	Michael Votta W 1:00pm - 2:15pm	Seats (Total: 5) PAC 2126

MUSC799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

MUSC801S **Advanced Seminar in Music Pedagogy**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: MUSC400; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor.

A detailed study of historical and contemporary methods of pedagogy, and analysis of pedagogical problems. Sections by instrument. Required of all candidates for the D.M.A. Degree in performance and literature.

0101	Irina Muresanu	Seats (Total: 20)
	M 6:00pm - 8:30pm	PAC 3160

MUSC801V **Advanced Seminar in Music Pedagogy**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: MUSC400; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor.

A detailed study of historical and contemporary methods of pedagogy, and analysis of pedagogical problems. Sections by instrument. Required of all candidates for the D.M.A. Degree in performance and literature.

0101	Martha Randall	Seats (Total: 15)
	W 3:00pm - 5:30pm	PAC 3168

MUSC801W **Advanced Seminar in Music Pedagogy**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: MUSC400; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor.

A detailed study of historical and contemporary methods of pedagogy, and analysis of pedagogical problems. Sections by instrument. Required of all candidates for the D.M.A. Degree in performance and literature.

0101	Sarah Frisof	Seats (Total: 10)
	Contact instructor or department for details.	

0201	Mark Hill Contact instructor or department for details.	Seats (Total: 10)
0301	Robert DiLutis Contact instructor or department for details.	Seats (Total: 10)
0401	Erich Heckscher Contact instructor or department for details.	Seats (Total: 10)
0501	Timothy Powell Contact instructor or department for details.	Seats (Total: 10)
0601	Gregory Miller Contact instructor or department for details.	Seats (Total: 10)
0701	Paul Gekker Contact instructor or department for details.	Seats (Total: 10)
0801	Matthew Guilford Contact instructor or department for details.	Seats (Total: 10)
0901	David Fedderly Contact instructor or department for details.	Seats (Total: 10)
1001	Paul Kellner Contact instructor or department for details.	Seats (Total: 10)
1101	Lee Hinkle Contact instructor or department for details.	Seats (Total: 10)

MUSC812 **Doctoral Opera Techniques II**

Credits: 2 Grading Method: Regular, Audit

Prerequisite: MUSC811; and permission of ARHU-School of Music department. Credit only granted for: MUSC612 or MUSC812.

Continuation of MUSC811. Techniques for opera preformance: Scene Study II; Acting II; Movement II: Stage Combat I; and Mask; and methodology seminar.

0101	Craig Kier TBA TBA	Seats (Total: 5) PAC 2170 PAC 1218	 Lab

MUSC814 **Doctoral Opera Techniques IV**

Credits: 2 Grading Method: Regular, Audit

Prerequisite: MUSC813; and permission of ARHU-School of Music department. Credit only granted for: MUSC614 or MUSC814.

Continuation of MUSC813. Techniques for opera performance: Scene Study IV; Dance II; Movement IV; and methodology seminar.

0101	Craig Kier	Seats (Total: 5)	
	TBA	PAC 2170	
	TBA	PAC 1218	Lab

MUSC830C **Doctoral Seminar in Music Literature**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed at least twelve hours in music history and literature.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music; required of all candidates for the D.M.A. Degree in literature-performance.

0101	Instructor: TBA	Seats (Total: 8)
	Contact instructor or department for details.	

MUSC831A **Doctoral Seminar in Music Literature**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC830; or permission of ARHU-School of Music department.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music. Required of all candidates for the D.M.A. Degree in literature-performance.

0101	Rita Sloan, Gran Wilson	Seats (Total: 10)
	W 3:00pm - 5:30pm	PAC 2200

MUSC831C **Doctoral Seminar in Music Literature**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC830; or permission of ARHU-School of Music department.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music. Required of all candidates for the D.M.A. Degree in literature-performance.

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

MUSC831P **Doctoral Seminar in Music Literature**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC830; or permission of ARHU-School of Music department.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music. Required of all candidates for the D.M.A. Degree in literature-performance.

0101	James Litzelman W 11:00am - 1:30pm	Seats (Total: 5) PAC 3160

MUSC831V **Doctoral Seminar in Music Literature**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC830; or permission of ARHU-School of Music department.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music. Required of all candidates for the D.M.A. Degree in literature-performance.

0101	Gran Wilson W 3:00pm - 5:30pm	Seats (Total: 10) PAC 2200

MUSC831W **Doctoral Seminar in Music Literature**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MUSC830; or permission of ARHU-School of Music department.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music. Required of all candidates for the D.M.A. Degree in literature-performance.

0101	Sarah Frisof Contact instructor or department for details.	Seats (Total: 10)

0201	Mark Hill Contact instructor or department for details.	Seats (Total: 10)
0301	Robert DiLutis Contact instructor or department for details.	Seats (Total: 10)
0401	Erich Heckscher Contact instructor or department for details.	Seats (Total: 10)
0501	Timothy Powell Contact instructor or department for details.	Seats (Total: 10)
0601	Gregory Miller Contact instructor or department for details.	Seats (Total: 10)
0701	Paul Gekker Contact instructor or department for details.	Seats (Total: 10)
0801	Matthew Guilford Contact instructor or department for details.	Seats (Total: 10)
0901	David Fedderly Contact instructor or department for details.	Seats (Total: 10)
1001	Paul Kellner Contact instructor or department for details.	Seats (Total: 10)
1101	Lee Hinkle Contact instructor or department for details.	Seats (Total: 10)

MUSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

MUSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

NACS Neuroscience & Cognitive Science Spring 2019

NACS600 **Ethics in Scientific Research**

Credits: 2 Grading Method: Regular, Audit

Prerequisite: Must have completed a year of graduate study. Restriction: Permission of instructor; and must be in Neurosciences and Cognitive Sciences (Doctoral) program. Credit only granted for: NACS600, PSYC788B, or BIOL600.

Issues of scientific integrity with emphasis on investigators in the laboratory sciences, including mentoring, scientific record keeping, authorship and peer review, ownership of data, use of animals and humans in research, and conflict of interest.

Also offered as BIOL600. Credit granted for NACS600 or BIOL600.

0101	Rochelle Newman	Seats (Total: 20)
	M 2:30pm - 4:10pm	LEF 1171

NACS608 Neuroscience and Cognitive Science Seminar

Credits: 1 Grading Method: Regular

Special seminar topics in Neuroscience and Cognitive Science.

0101	Ricardo Araneda	Seats (Total: 20)
	F 10:15am - 11:15am	BRB 1103

NACS642 Cognitive Neuroscience

Credits: 4 Grading Method: Regular, Audit

A study of the fundamental concepts and techniques of cognitive neuroscience. Hands-on experience with three critically different cognitive neuroscience methods: EEG, MEG, and fMRI.

0101	Ellen Lau	Seats (Total: 15)
	TuTh 10:00am - 12:00pm	COL 0201

NACS644 Cellular and Molecular Neuroscience

Credits: 4 Grading Method: Regular, Audit

Prerequisite: NACS641; or permission of instructor.

Overview of insights into the molecular mechanisms underlying the structure and function of the nervous system.

0101	Colenso Speer	Seats (Total: 20)
	TuTh 3:30pm - 5:30pm	BPS 1230

NACS728F **Selected Topics in Neuroscience and Cognitive Science; Introduction to Functional Magnetic Resonance Imaging**

Credits: 3 Grading Method: Regular, Audit

Graduate seminar on selected topics in contemporary neuroscience and Cognitive science. Extensive readings from the primary literature. Topics vary by semester.

0101	Luiz Pessoa	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	JMZ 0118

NACS728M **Selected Topics in Neuroscience and Cognitive Science; Grant Writing**

Credits: 2 Grading Method: Regular, Audit

Graduate seminar on selected topics in contemporary neuroscience and Cognitive science. Extensive readings from the primary literature. Topics vary by semester.

Also offered as BIOL709A. Credit granted for NACS728M or BIOL709A. Instruction in grant-writing skill, introduction to resources, discussions on how to make your grant competitive, and insight into the review process. The goal will be to have each participant submit an NRSA.

0101	Elizabeth Quinlan	Seats (Total: 14)
	Th 1:00pm - 3:00pm	BRB 3101

NACS728N **Selected Topics in Neuroscience and Cognitive Science; Diseases of the Nervous System**

Credits: 3 Grading Method: Regular, Audit

Graduate seminar on selected topics in contemporary neuroscience and Cognitive science. Extensive readings from the primary literature. Topics vary by semester.

0101	Quentin Gaudry	Seats (Total: 8)
	TuTh 2:00pm - 3:15pm	BPS 0283

NACS728Q **Selected Topics in Neuroscience and Cognitive Science; Biological Bases of Behavior Laboratory**

(Perm req)

Credits: 4 Grading Method: Regular, Audit

Graduate seminar on selected topics in contemporary neuroscience and Cognitive science. Extensive readings from the primary literature. Topics vary by semester.

0101	David Yager MW 9:00am - 9:50am M 1:00pm - 5:00pm	Seats (Total: 6) BPS 1236 BPS 0263	 Lab
0201	David Yager MW 9:00am - 9:50am Tu 1:00pm - 5:00pm	Seats (Total: 6) BPS 1236 BPS 0263	 Lab
0301	David Yager MW 9:00am - 9:50am W 1:00pm - 5:00pm	Seats (Total: 6) BPS 1236 BPS 0263	 Lab

NACS728W **Selected Topics in Neuroscience and Cognitive Science; Computational Psycholinguistics**

Credits: 3 Grading Method: Regular, Audit

Graduate seminar on selected topics in contemporary neuroscience and Cognitive science. Extensive readings from the primary literature. Topics vary by semester.

Also offered as LING849C and CMSC828F. Credit only granted for LING849C, CMSC828F or NACS728W.

0101	Naomi Feldman TuTh 2:00pm - 3:15pm	Seats (Total: 15) MMH 1108B

NACS798 **Master's Non-Thesis Research**

Credits: 1-3 Grading Method: Regular

Individual research course for NACS non-thesis MS degree

Contact department for information to register for this course.

NACS799 **Master's Thesis Research**

Credits: 1-3 Grading Method: Regular

Individualized research course for NACS thesis MS degree

Contact department for information to register for this course.

NACS898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

NACS899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Indivdual instruction course: contact department or instructor to obtai section number

Contact department for information to register for this course.

NAVY Navy Spring 2019

NAVY101 **Sea Power and Maritime Affairs**

Credits: 3 Grading Method: Regular

Introduces the student to the key themes of naval and maritime history. Curriculum presents an analysis through lectures, reading, and student discussion of the relationship of sea power to American history. Classical concepts and contemporary employment of sea power are examined by viewing historic and current naval and maritime developments.

0101	Edward Butler	Seats (Total: 40)
	TuTh 8:00am - 9:15am	EGR 0135

NAVY108 **Naval Science Leadership Lab**

Credits: 1 Grading Method: Regular

Introduces the student to a variety of instructional sessions and/or activities that will develop the leadership component of the Naval ROTC program. The Naval Science leadership lab may include, but not be limited to, close-order drill, physical fitness training, ceremonial functions, Department of the Navy policy, guest lecturers, general military training (GMT), Anti-Terrorism Force Protection (ATFP), traffic safety, nutrition, stress management, prevention of sexual harassment, and operations security.

0101	Nathaniel Kaine	Seats (Total: 75)
	Th 7:00am - 7:50am	ESJ 2204

NAVY201 **Navigation**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of UGST-Navy ROTC. Additional information: Priority enrollment will be given to students enrolled in the University of Maryland NROTC program.

Introduces the student to a broad yet thorough education in basic surface ship navigation. Curriculum presents an overview of tools of the modern naval watch officer, and topics include celestial navigation, rules of the nautical road, piloting, practical chartwork, tides, instruments, publications, records, and electronic navigation systems. Instructional sessions and/or activities develop the maritime proficiency core competency of the Naval Reserve Officer Training Corps (NROTC) program.

0101	Barry Feinstein	Seats (Total: 20)
	MW 8:00am - 9:15am	ARM 0120

NAVY301 **Naval Ship Systems II (Weapons)**

(Perm req)

Credits: 3 Grading Method: Regular

Recommended: MATH140, MATH141, and PHYS161. Restriction: Permission of UGST-Navy ROTC. Additional information: Priority enrollment will be given to students enrolled in the NROTC program.

Introduces the student to a comprehensive fundamental understanding of United States naval weaponry. Includes theory and employment of weapons systems, including the processes of detection, evaluation, threat analysis, weapon selection, delivery, guidance, and explosives. Radar and sonar systems and major weapon types, including capabilities and limitations. Facets of command, control, and communications as means of weapons system integration. Curriculum presents an in-depth review of surface, sub-surface, aviation, and Marine Corps weapons and platforms.

0101	Edward Butler	Seats (Total: 20)
	MW 8:00am - 9:15am	ARM 0108

NAVY302 **Evolution of Warfare**

Credits: 3 Grading Method: Regular

Recommended: NAVY100 and NAVY101. Restriction: Permission of UGST-Navy ROTC. Additional information: Priority enrollment will be given to students in the NROTC program.

Traces the development of warfare, from earliest recorded history to the present, with focus on the impact of major military theorists, strategists, tacticians, and technological developments. The student acquires an intermediate sense of strategy and develops an understanding of military alternatives and the impact of historical precedent on military thought and actions.

0101	Nathaniel Kaine	Seats (Total: 20)
	TuTh 9:30am - 10:45am	SKN 1112

NAVY401 **Leadership and Ethics**

(Perm req)

Credits: 3 Grading Method: Regular

Recommended: NAVY200. Restriction: Permission of UGST-Navy ROTC. Additional information: Priority enrollment will be given to students enrolled in the NROTC program.

Integrates an intellectual exploration of Western moral traditions and ethical philosophy with military leadership, core values, the Uniform Code of Military Justice, and Navy regulations. The course provides students with a basic understanding of major moral traditions including Relativism, Utilitarianism, Kantian Ethics, Natural Law Theory, Divine Command Theory, and Virtue Ethics.

0101	Troy Mong TuTh 8:00am - 9:15am	Seats (Total: 20) ARM 0108	

NFSC Nutrition and Food Science Spring 2019

The following courses may involve the use of animals. Students who are concerned about the use of animals in teaching have the responsibility to contact the instructor, prior to course enrollment, to determine whether animals are to be used in the course, whether class exercises involving animals are optional or required and what alternatives, if any, are available.

NFSC100 Elements of Nutrition

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: LS | General Education: DSNS

Fundamentals of human nutrition. Nutrient requirements related to changing individual and family needs.

0101	David Lei, Shaik Rahaman, Hee-Jung Song, Seong-Ho Lee MW 11:00am - 11:50am W 3:00pm - 3:50pm	Seats (Total: 25) TYD 0130 SKN 1112	 Discussion
0102	Hee-Jung Song, Shaik Rahaman, Seong-Ho Lee, David Lei MW 11:00am - 11:50am W 2:00pm - 2:50pm	Seats (Total: 25) TYD 0130 MTH 0304	 Discussion
0103	David Lei, Seong-Ho Lee, Shaik Rahaman, Hee-Jung Song MW 11:00am - 11:50am Tu 4:00pm - 4:50pm	Seats (Total: 25) TYD 0130 PLS 1115	 Discussion
0104	David Lei, Seong-Ho Lee, Shaik Rahaman, Hee-Jung Song MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 25) TYD 0130 EDU 2102	 Discussion

0105	Seong-Ho Lee, David Lei, Hee-Jung Song, Shaik Rahaman MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 25) TYD 0130 PLS 1119	 Discussion
0106	Seong-Ho Lee, Shaik Rahaman, Hee-Jung Song, David Lei MW 11:00am - 11:50am W 2:00pm - 2:50pm	Seats (Total: 25) TYD 0130 KEY 1117	 Discussion
0108	Shaik Rahaman, Hee-Jung Song, David Lei, Seong-Ho Lee MW 11:00am - 11:50am W 12:00pm - 12:50pm *Section 0108 is recommended for majors only.*	Seats (Total: 25) TYD 0130 PLS 1111	 Discussion
0110	Shaik Rahaman, Hee-Jung Song, Seong-Ho Lee, David Lei MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 25) TYD 0130 PLS 1119	 Discussion
0111	Shaik Rahaman, David Lei, Hee-Jung Song, Seong-Ho Lee MW 11:00am - 11:50am Tu 2:00pm - 2:50pm	Seats (Total: 25) TYD 0130 MTH B0427	 Discussion
0113	David Lei, Seong-Ho Lee, Shaik Rahaman, Hee-Jung Song MW 11:00am - 11:50am Th 2:00pm - 2:50pm	Seats (Total: 25) TYD 0130 JMZ 0205	 Discussion
0117	Seong-Ho Lee, Shaik Rahaman, Hee-Jung Song, David Lei MW 11:00am - 11:50am W 10:00am - 10:50am	Seats (Total: 25) TYD 0130 KEY 0123	 Discussion
0118	David Lei, Seong-Ho Lee, Hee-Jung Song, Shaik Rahaman MW 11:00am - 11:50am W 9:00am - 9:50am	Seats (Total: 25) TYD 0130 KEY 0123	 Discussion

NFSC220 **Diet: Is it a cause or a solution**

Credits: 3 | Grading Method: Regular, Audit | General Education: DSSP, SCIS

If diet is a very straightforward topic; then why and how does this simple matter result in complicated health problems? Diet can provide a simple solution to numerous health issues. So, why do many people fail to follow this seemingly simple solution and still suffer from obesity and other diet-related diseases? Diet is a topic that most people know but few people understand. In addition, diet has become one of the most important lenses for looking at a variety of social, economic, and cultural issues. Since the concept of diet is continuum and has multifaceted aspects, we need to understand it in broad and multidisciplinary perspectives including social, cultural and economic aspects.

0101	Hee-Jung Song TuTh 11:00am - 12:15pm	Seats (Total: 30) CSI 2107

NFSC315 **Nutrition During the Life Cycle**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: NFSC100. Formerly: NUTR315.

A study of how development throughout life, including prenatal development, pregnancy, lactation, adolescence and aging, alter nutrient requirements. Students will apply this knowledge to the dietary needs and food choices of these different groups.

0101	Monica Whent TuTh 2:00pm - 3:15pm	Seats (Total: 101) TYD 0117

NFSC386 **Experiential Learning**

(Perm req)

Credits: 3-6 | Grading Method: Regular, Pass-Fail

Prerequisite: Permission of AGNR-Nutrition and Food Science department. Restriction: Junior standing or higher. Formerly: FDSC386 and NUTR386.

Contact department for information to register for this course.

NFSC398 **Seminar**

Credits: 1 | Grading Method: Regular

Presentation and discussion of current literature and research in food science.

FDSC majors only.

0101	Qin Wang F 12:00pm - 12:50pm	Seats (Total: 15) SKN 0101	

NFSC399 **Special Problems in Food Science**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Designed for advanced undergraduates. Specific problems in food science will be assigned.

Contact department for information to register for this course.

NFSC412 **Food Processing Technology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM241, CHEM242, NFSC431, NFSC414, and NFSC434. Corequisite: NFSC421 and NFSC423. Recommended: MATH120; or completion of MATH220 recommended.

Provides in-depth study of the major industrial modes of food preservation. It integrates aspects of the biology, microbiology, biochemistry and engineering disciplines as they relate to food processing technology and food science.

0101	Rohan Tikekar MW 10:00am - 10:50am M 1:00pm - 4:30pm	Seats (Total: 18) KEY 0116 MMH 3401	 Lab
0102	Rohan Tikekar MW 10:00am - 10:50am W 2:00pm - 5:30pm	Seats (Total: 18) KEY 0116 MMH 3401	 Lab

NFSC430 **Food Microbiology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI223; or permission of instructor. Credit only granted for: ANSC430 or NFSC430. Formerly: FDSC430.

A study of microorganisms of major importance to the food industry with emphasis on food-borne outbreaks, public health significance, bioprocessing of foods, disease control, and the microbial spoilage of foods.

0101	Robert Buchanan TuTh 9:00am - 10:15am	Seats (Total: 40) MMH 3112

NFSC431 **Food Quality Control**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Definition and organization of the quality control function in the food industry; preparation of specifications; statistical methods for acceptance sampling; in-plant and processed product inspection. Instrumental and sensory methods for evaluating sensory quality, identity and wholesomeness and their integration into grades and standards of quality. Statistical Process Control (SPC).

0101	Abani Pradhan	Seats (Total: 20)	
	TuTh 11:00am - 11:50am F 9:00am - 11:30am	SKN 0101 MMH 3419	Lab

NFSC434 **Food Microbiology Laboratory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in NFSC430. Credit only granted for: NFSC434 or ANSC434. Formerly: FDSC434.

A study of techniques and procedures used in the microbiological examination of foods.

0101	Robert Buchanan	Seats (Total: 20)	
	TuTh 12:30pm - 4:00pm	MMH 3419	Lab

NFSC450 **Food and Nutrient Analysis**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BCHM461 and NFSC100. Formerly: NUTR450.

Methods and practices of the analysis of foods and nutrients. An overview of the principles and basic mechanisms used in many of the analytical procedures commonly used in food and nutrition research. Emphasis will be placed on hands-on development of skills necessary to complete each analytical procedure; and on the accurate and concise description of the methodology and results from their application and on the regulations governing food analysis for nutritional labeling.

0101	Diana Obanda	Seats (Total: 13)	
	W 1:00pm - 1:50pm W 2:00pm - 5:00pm	MMH 3112 MMH 3419	Lab

0102	Diana Obanda W 1:00pm - 1:50pm M 1:00pm - 4:00pm	Seats (Total: 13) MMH 3112 MMH 3419	 Lab

NFSC460 **Medical Nutrition Therapy**

(Perm req)

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: NFSC380 and NFSC440; and permission of AGNR-Nutrition and Food Science department. Formerly: NUTR460.

Modifications of the normal adequate diet to meet human nutritional needs in acute and chronic diseases and metabolic disorders.

0101	Margaret Udahogora MW 1:00pm - 2:15pm M 2:30pm - 5:30pm	Seats (Total: 17) PLS 1113 SKN 0101	 Lab
0102	Margaret Udahogora MW 1:00pm - 2:15pm W 2:30pm - 5:30pm	Seats (Total: 17) PLS 1113 SKN 0101	 Lab

NFSC470 **Community Nutrition**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP, DVCC

Prerequisite: NFSC315; and permission of AGNR-Nutrition and Food Science department. Formerly: NUTR470.

Perspectives underlying the practice of nutrition services in community settings. Assessment of needs, program planning and evaluation. Programs and strategies to meet nutrition needs outside the acute care setting, such as nutrition education and food assistance. National nutrition policy and federal initiatives in nutrition will be examined. Students will be required to travel to local community nutrition sites during the semester.

0101	Nadine Sahyoun MW 11:00am - 11:50am F 10:00am - 11:50am	Seats (Total: 40) TYD 0102 EDU 3315	 Discussion

NFSC490 **Special Problems in Nutrition**

(Perm req)

Credits: 2-3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: NFSC440; and permission of AGNR-Nutrition and Food Science department.

Individually selected problems in the area of human nutrition.

Contact department for information to register for this course.

NFSC491 **Issues and Problems in Dietetics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: CS

Prerequisite: NFSC350; and permission of AGNR-Nutrition and Food Science department. Corequisite: NFSC460. Restriction: Senior standing or higher; and must be in Nutrition and Food Science: Dietetics program.

A capstone course for dietetics majors. Students will integrate knowledge and theory of nutrition, food, management, psychology, and social behaviors necessary to support quality dietetic practice. Working in teams, students will participate in case studies, simulated situations and community projects. Individuals and groups will present cases as well as papers on published research.

0101	Monica Whent	Seats (Total: 25)
	MW 8:30am - 10:50am	HBK 0103

NFSC498 **Selected Topics**

(Perm req)

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Selected current aspects of food.

Contact department for information to register for this course.

NFSC498A **Selected Topics; Individual Study**

(Perm req)

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

Selected current aspects of food.

Contact department for information to register for this course.

NFSC498L **Selected Topics; Diet and Optimal Human Health**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Selected current aspects of food.

0101	Seong-Ho Lee	Seats (Total: 20)
	Tu 2:00pm - 4:30pm	MMH 3112

NFSC633 **Food Polymer Science**

Credits: 3 Grading Method: Regular

Prerequisite: Permission of instructor. Credit only granted for: NFSC633 or NFSC679P. Formerly: NFSC679P.

Food polymers including protein and carbohydrate from food, and their chemical, physical, and functional properties together with their structure-function relationship will be discussed. Food polymer applications in food and non-food areas will be covered. Principles and applications of instrumental methods for polymer characterization will be introduced. An emphasis on nanotechnology and its application to design and characterization food polymers will be included.

0101	Qin Wang	Seats (Total: 15)
	Th 1:00pm - 3:45pm	SKN 0101

NFSC660 **Research Methods**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed one statistics course. Formerly: NUTR 660.

A study of appropriate research methodology and theories including experimental design. Each student is required to develop a specimen research proposal.

0101	David Lei	Seats (Total: 20)
	MW 9:00am - 10:15am	HBK 1108

NFSC678A **Selected Topics in Nutrition**

Credits: 1-4 Grading Method: Regular, Audit

Individual or group study in an area of nutrition.

Contact department for information to register for this course.

NFSC678L **Selected Topics in Nutrition; Diet and Optimal Human Health**

Credits: 3 Grading Method: Regular, Audit

Individual or group study in an area of nutrition.

0101	Seong-Ho Lee	Seats (Total: 5)
	Tu 2:00pm - 4:30pm	MMH 3112

NFSC678M **Selected Topics in Nutrition; Current Topics in Nutrition and Inflammatory Disease**

Credits: 3 Grading Method: Regular, Audit

Individual or group study in an area of nutrition.

Analysis of current topics related to diet, nutrition, and inflammatory disease at cellular, molecular and biochemical level. Further, this course will provide overview of the current methods, and in vitro/vivo model systems used in research. Syllabus includes topics relevant to dietary regulation of genes/proteins and their impact on inflammatory diseases. This course is designed to help students to understand and apply current scientific concepts and research methods, and to obtain necessary skills in evaluation/interpretation of evidence based scientific data.

0101	Shaik Rahaman M 2:15pm - 5:00pm	Seats (Total: 20) MMH 3112	

NFSC679F **Selected Topics in Food Science; Food Processing Technology**

Credits: 1-6 Grading Method: Regular

Individual or group study in an area of food science.

0101	Rohan Tikekar MW 10:00am - 10:50am M 1:00pm - 4:30pm	Seats (Total: 18) KEY 0116 MMH 3401	Lab
0102	Rohan Tikekar MW 10:00am - 10:50am W 2:00pm - 5:30pm	Seats (Total: 18) KEY 0116 MMH 3401	Lab

NFSC679M **Selected Topics in Food Science**

Credits: 1-6 Grading Method: Regular

Individual or group study in an area of food science.

0101	Robert Buchanan TuTh 9:00am - 10:15am	Seats (Total: 5) MMH 3112	

NFSC688 **Seminar in Nutrition and Food Science**

Credits: 1-3 Grading Method: Regular, Audit

This is a seminar course presentedy by NFSC graduate students and invited speakers in the field of nutrition and food science.

0101	David Lei	Seats (Total: 25)
	W 12:00pm - 12:50pm	SKN 0101

NFSC699 **Problems in Nutrition and Food Science**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Credit according to time scheduled and magnitude of problem. An experimental program on a topic other than the student's thesis problem will be conducted. Four credits shall be the maximum allowed toward an advanced degree.

Contact department for information to register for this course.

NFSC799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

First and second semesters. Credit in proportion to work done and results accomplished. Investigation in some phases of foodservice administration which may form the basis of a thesis. results in the form of a thesis.

Contact department for information to register for this course.

NFSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

First and second semesters. Oral reports on special topics or recently published research in nutrition. Distinguished scientists are invited as guest lecturers. A maximum of three credits allowed for the M.S.

Contact department for information to register for this course.

NFSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

NIAP National Institute of Aeronautics - Va Tech Spring 2019

NIAP788A **Special Topics in National Institue of Aerospace Engineering; Applied Numerical Method**

Credits: 1-3 Grading Method: Regular, Audit

TV01	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

NIAP788B **Special Topics in National Institue of Aerospace Engineering; Applied Linear Controls**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

NIAP788Z **Applied Numerical Methods**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

NIAV National Institute of Aeronautics - Univ of VA Spring 2019

NIAV788A **Advanced Topics; Engineering Design Optimization**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

NIAV788B **Advanced Topics; Multibody Mechanical Systems**

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

NIAV788W **Advanced Topics; Statistics for Engineers and Scientists**

Credits: 3 Grading Method: Regular

TV01	Sung Lee	Seats (Total: 20)
	Contact instructor or department for details.	

PEER Health Center Spring 2019

PEER318 **CARE Peer Advocacy**

(Perm req)

Credits: 3 Grading Method: Regular

Designed to train students to become Peer Advocates who are responsible for providing crisis and short-term support services for victims of sexual assault, relationship violence, stalking, sexual harassment and child abuse.Students will be meeting with clients and providing emotional support and resources (both on and off campus). During weekly classes, students will be trained in trauma-informed crisis intervention procedures that will not only help them assist clients during in- person sessions but will help them support clients via the crisis cell. Students will be expected to maintain the crisis cell (on a shared basis)throughout the semester as well as maintain 10 hours per week in the CARE office. In addition to maintaining the crisis cell and office hours, during the spring semester students will be tasked with working as a team in planning and executing a Take Back the Night event.

0101	Christina Jay	Seats (Total: 15)
	W 5:00pm - 6:30pm Contact instructor or department for details.	Location: TBA

PEER319 **CARE to Stop Violence Outreach Peer Program; Care Peer Outreach**

(Perm req)

Credits: 3 Grading Method: Regular

A two semester, 6-credit course designed to train students in the knowledge, values and skills to build professional relationships and become leaders in community development related to the social justice issue of sexual misconduct with emphasis on the college campus environment.

0101	Carly Cottone	Seats (Total: 15)
	MW 5:00pm - 5:50pm Contact instructor or department for details.	KEY 0100
	Contact department or instructor for details.	

PEER321 **Advanced Peer Education Mental Health and Wellness**

Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: Students must complete an interview before enrolling in this course; and minimum grade of B- in PEER311. Restriction: Minimum cumulative GPA of 2.5; and permission of instructor. Credit only granted for: HLTH381 or PEER321. Formerly: HLTH381. Additional information: In addition to the weekly class lectures and experiential learning opportunities facilitating educational outreach on campus, advanced peer educators will meet weekly in groups. These group meetings will provide a space for the students to incorporate class content to enhance the design, development, and evaluation of a sexual assault prevention or awareness program for the University of Maryland campus community. Coordinators will meet with student groups to facilitate and supervise this process.

PEER 321 is a three-credit, interdisciplinary course building upon the stress management, mental illness, appropriate on/off campus resources, stigma, body image, helping a friend in distress, bystander intervention, and mental health/wellness knowledge gained during PEER 311. Students will gain a fundamental understanding of program planning basics through a series of assignments where they theoretically plan their own prevention or awareness program for the University of Maryland campus community. Students who become a Peer Leader during year two may have the opportunity to implement this program on campus. This course also provides advanced training in the skills necessary to serve as an effective Peer Educator under the University Health Center. Peer Educators will continue to provide outreach and education to the campus community through various outreach events, workshops, and more.

0101	Sarah Wilson	Seats (Total: 15)
	M 4:00pm - 5:00pm	JMZ 1124
	W 4:00pm - 6:00pm	JMZ 1124

PEER322 **Advanced Peer Education: Preventing Power-Based Violence**

Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: Students must complete an interview before enrolling in this course; and minimum grade of B- in PEER312. Restriction: Minimum cumulative GPA of 2.5; and permission of instructor. Credit only granted for: HLTH382 or PEER322. Formerly: HLTH382. Additional information: In addition to the weekly class lectures and experiential learning opportunities facilitating educational outreach on campus, advanced peer educators will meet weekly in groups. These group meetings will provide a space for the students to incorporate class content to enhance the design, development, and evaluation of a sexual assault prevention or awareness program for the University of Maryland campus community. Coordinators will meet with student groups to facilitate and supervise this process.

PEER 322 is a three-credit, interdisciplinary course building upon the sexual assault, relationship violence, stalking, bystander intervention, and wellness knowledge gained during PEER 312. Students will gain a fundamental understanding of program planning basics through a series of assignments where they theoretically plan their own prevention or awareness program for the University of Maryland campus community. Students who become a Peer Leader during year two may have the opportunity to implement this program on campus. This course also provides advanced training in the skills necessary to serve as an effective Peer Educator under the University Health Center. Peer Educators will continue to provide outreach and education to the campus community through various outreach events, workshops, and more.

0101	Rajan Parikh	Seats (Total: 15)
	M 4:00pm - 5:00pm	JMZ 2120
	W 4:00pm - 6:00pm	JMZ 2122

PEER323 **Advanced Peer Education: Alcohol and Other Drugs Education**

Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: Students must complete an interview before enrolling in this course; and minimum grade of B- in PEER313. Restriction: Minimum cumulative GPA of 2.5; and permission of instructor. Credit only granted for: HLTH380 or PEER323. Formerly: HLTH380. Additional information: In addition to the weekly class lectures and experiential learning opportunities facilitating educational outreach on campus, advanced peer educators will meet weekly in groups. These group meetings will provide a space for the students to incorporate class content to enhance the design, development, and evaluation of an alcohol and other drugs education program for the University of Maryland campus community. Coordinators will meet with student groups to facilitate and supervise this process.

PEER 323 is a three-credit, interdisciplinary course building upon the alcohol and other drugs (AOD) education knowledge gained during PEER 313. Students will gain a fundamental understanding of program planning basics through a series of assignments where they theoretically plan their own wellness program for the University of Maryland campus community. Students who become Peer Leaders during year two (PEER338) may have the opportunity to implement this program on campus. This course also provides advanced training in the skills necessary to serve as an effective Peer Educator under the University Health Center. Peer Educators will continue to provide outreach and education to the campus community through various outreach events, workshops, and more.

0101	Julia Matute	Seats (Total: 15)
	M 4:00pm - 5:00pm	JMZ 0122
	W 4:00pm - 6:00pm	JMZ 0122

PEER324 **Advanced Peer Education: Sexual Health & Wellness**

Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: Students must complete an interview before enrolling in this course; and minimum grade of B- in PEER314. Restriction: Minimum cumulative GPA of 2.5; and permission of instructor. Credit only granted for: HLTH383 or PEER324. Formerly: HLTH383. Additional information: In addition to the weekly class lectures and experiential learning opportunities facilitating educational outreach on campus, advanced peer educators will meet weekly in groups. These group meetings will provide a space for the students to incorporate class content to enhance the design, development, and evaluation of a sexual health and wellness program for the University of Maryland campus community. Coordinators will meet with student groups to facilitate and supervise this process.

PEER 324 is a three-credit, interdisciplinary course building upon the sexual health and wellness knowledge gained during PEER 314. Students will gain a fundamental understanding of program planning basics through a series of assignments where they theoretically plan their own wellness program for the University of Maryland campus community. Students who become Peer Leaders during year two (PEER338) may have the opportunity to implement this program on campus. This course also provides advanced training in the skills necessary to serve as an effective Peer Educator under the University Health Center. Peer Educators will continue to provide outreach and education to the campus community through various outreach events, workshops, and more.

0101	Jenna Messman	Seats (Total: 15)
	M 4:00pm - 5:00pm	JMZ 3120
	W 4:00pm - 6:00pm	JMZ 3120

PEER338 **PEER LEADERSHIP AND EDUCATION**

Credits: 3 Grading Method: Regular

An interdisciplinary independent study designed to enhance the scope of learning around UHC peer education topics and train students to serve as leaders for those enrolled in first year peer courses, PEER31X and PEER32X. Second year peers are trained to facilitate intersectional and advanced health education dialogue, as well as serve in leadership roles for the course in which they were previously enrolled, PEER31X and PEER32X. Additionally, Peer Leader responsibilities include creating and implementing campus wide events to promote learning around the intersections between UHC peer education group topics (power-based violence, sexual health, alcohol and other drugs, stress and mental health). Peer Leaders will have different responsibilities based on the programmatic needs and goals of the semester.

0101	Jenna Messman, Rajan Parikh, Sarah Wilson	Seats (Total: 7)
	M 5:15pm - 6:45pm	JMZ 1103
	W 5:15pm - 6:15pm	JMZ 1103

PERS Persian Spring 2019

PERS102 **Elementary Persian II**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PERS101; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be native/fluent speaker of Persian.

Continuation of PERS101 with emphasis on the use of formal language, vocabulary building, and reading.

0101	Susan Moinfar	Seats (Total: 15)
	MTuWThF 10:00am - 10:50am	HJP 2114

PERS212 **Intermediate Reading in Persian**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PERS211 and PERS201; or permission of instructor. Corequisite: PERS202; or permission of instructor.

Focus on linguistic skill specific to reading; introduction to written traditions of Persian.

0101	Susan Moinfar	Seats (Total: 15)
	MWF 11:00am - 11:50am	HJP 2114

PERS252 **Gender and Body in Iran**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Credit only granted for: PERS298A, WMST298J, or PERS252. Formerly: PERS298A.

Multidisciplinary approach to key topics concerning gender and body in Iran, to include insights from religion, history, sociology, anthropology, disability studies, travel literature, arts, and fashion. Taught in English.

0101	Ida Meftahi	Seats (Total: 30)
	MW 2:00pm - 3:15pm	HBK 1108

PERS302 **Advanced Persian II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PERS301; or students who have taken courses with comparable content may contact the department. Restriction: Must not be native/fluent speaker of Persian.

Further development of speaking, reading, writing, listening and cultural knowledge, with special focus on reading, in a variety of literary genres.

0101	Nahal Akbari-Saneh	Seats (Total: 15)
	MWF 1:00pm - 1:50pm	HJP 2114

PERS312 **Contemporary Iranian Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PERS301; or students who have taken courses with comparable content may contact the department. Restriction: Must not be native/fluent speaker of Persian.

Study of the culture of contemporary Iran (post-evolution) with focus o the contemporary social, political, literary and artistic life in Iran. Taught in Persian.

0101	Manizhe Galledari	Seats (Total: 15)
	MWF 12:00pm - 12:50pm	HJP 2114

PERS386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-School of Languages, Literatures, and Cultures department.

Pre-professional experience in research, analysis and writing in a work setting. Project proposal approved by faculty and internship sponsor.

Contact department for information to register for this course.

PERS398B **Special Topics in Persian Studies; Arts, Leisure, and Entertainment: Urban Life in Modern Iran**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topic to be announced when course is offered. Taught in Persian

Also offered as HIST328C. Credit granted for PERS398B, HIST328C, JWST319I, or TDPS358B. From traditional to modern forms of art and entertainment, from popular and youth culture to the official, and from the underground art scene to online social media, this cultural history course sheds light on the formation and transformations of the urban public culture in modern Iran. Taught in English.

0101	Ida Meftahi	Seats (Total: 30)
	MW 3:30pm - 4:45pm	JMZ 1122

PERS398M **Special Topics in Persian Studies; Lyrics of Mystical Love: Rumi, Song of Songs, and St. Teresa of Avila to Mirabai and Manhae**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topic to be announced when course is offered. Taught in Persian

Also offered as RELS319M and CMLT398G. Credit granted for PERS398M, RELS319M, or CMLT398G. A journey through the mystical love poetry of some of the world's most important Jewish, Christian, Muslim, Hindu, and Buddhist mystical poets. Close reading of these poetic masterpieces alongside modern studies of mysticism and mystical poetry by scholars of literature, religious studies, and cognitive science. Taught in English.

0101	Matthew Miller	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	JMZ 1224

PERS399 **Directed Study in Persian**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Directed study with faculty supervision.

Contact department for information to register for this course.

PERS498A **Special Topics in Persian Studies; Advanced Literacy Skills in Persian**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topic and language to be announced when offered.

Taught in Persian.

0101	Manizhe Galledari	Seats (Total: 5)
	Tu 9:00am - 11:45am	HJP 3115

PERS498D **Special Topics in Persian Studies; Political, Economic, and Social Thought in Today's Iran**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topic and language to be announced when offered.

Taught in Persian.

0101	Mohammad Bazargan	Seats (Total: 5)
	M 9:00am - 11:45am	HJP 3115

PERS498E **Special Topics in Persian Studies; Translation of Contemporary Persian Texts**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topic and language to be announced when offered.

0101	Nahal Akbari-Saneh	Seats (Total: 5)
	F 9:00am - 11:45am	HJP 3115

PERS498G **Special Topics in Persian Studies; Masterpieces of Persian Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topic and language to be announced when offered.

Taught in Persian.

0101	Mohammad Bazargan Th 6:00pm - 8:30pm	Seats (Total: 15) JMZ 2117	

PHIL Philosophy Spring 2019

PHIL100 **Introduction to Philosophy**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU

An introduction to the literature, problems, and methods of philosophy either through a study of some of the main figures in philosophic thought or through an examination of some of the central and recurring problems of philosophy.

0201	Heather Adair MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 25) SKN 0200 EDU 3233	Discussion
0202	Heather Adair MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 25) SKN 0200 KNI 1103	Discussion
0203	Heather Adair MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 25) SKN 0200 ASY 3221	Discussion
0204	Heather Adair MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 25) SKN 0200 EDU 2102	Discussion
0205	Heather Adair MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 25) SKN 0200 EDU 2102	Discussion
0206	Heather Adair MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 25) SKN 0200 ASY 3219	Discussion

PHIL140 **Contemporary Moral Issues**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU

The uses of philosophical analysis in thinking clearly about such widely debated moral issues as abortion, euthanasia, homosexuality, pornography, reverse discrimination, the death penalty, business ethics, sexual equality, and economic justice.

0101	Dimiter Kirilov TuTh 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) MMH 1400 ONLINE	Discussion
0102	Dimiter Kirilov TuTh 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 25) MMH 1400 ONLINE	Discussion
0103	Dimiter Kirilov TuTh 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) MMH 1400 ONLINE	Discussion
0104	Dimiter Kirilov TuTh 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) MMH 1400 PLS 1117	Discussion
0105	Dimiter Kirilov TuTh 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 25) MMH 1400 PLS 1115	Discussion
0106	Dimiter Kirilov TuTh 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) MMH 1400 PLS 1115	Discussion
0201	Kalewold Kalewold MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 25) MMH 1400 SYM 0215	Discussion
0202	Kalewold Kalewold MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 25) MMH 1400 SYM 0209	Discussion
0203	Kalewold Kalewold MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 25) MMH 1400 SYM 0209	Discussion

0204	Kalewold Kalewold MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 25) MMH 1400 PHY 1219	Discussion
0205	Kalewold Kalewold MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 25) MMH 1400 SYM 0209	Discussion
0206	Kalewold Kalewold MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 25) MMH 1400 WDS 1114	Discussion

PHIL170 **Introduction to Logic**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: MS | General Education: FSAR

Development of analytical reasoning skills through study of formal logics, reasoning systems, and fallacious inference patterns.

0101	Michael McCourt MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 37) PHY 1412 SQH 1103	Discussion
0102	Michael McCourt MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 37) PHY 1412 SQH 1103	Discussion
0103	Michael McCourt MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 37) PHY 1412 SQH 1103	Discussion
0104	Michael McCourt MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 38) PHY 1412 SQH 1105	Discussion
0105	Michael McCourt MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 38) PHY 1412 SQH 1105	Discussion

0106	Michael McCourt MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 38) PHY 1412 SQH 1105	Discussion

PHIL201 **Spooky Action at a Distance? Where Physics Meets Metaphysics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU, SCIS

Recommended: Students should be comfortable with moderately mathematical presentations. Placement into MATH110 or higher is strongly recommended. Credit only granted for: PHIL201 or PHIL209I. Formerly: PHIL209I.

Einstein believed that physics should represent a "reality in space and time, free from spooky action at a distance." He worried that quantum theory failed this test. Later developments suggest that quantum systems really can influence one another instantly, no matter how far apart they are, but the question remains controversial and experiments are not sufficient to provide an answer. This self-contained course will draw on philosophy and physics to investigate the controversy.

0101	Allen Stairs MW 3:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 25) SYM 0200 ONLINE	Discussion
0102	Allen Stairs MW 3:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 25) SYM 0200 ONLINE	Discussion
0103	Allen Stairs MW 3:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 25) SYM 0200 ONLINE	Discussion

PHIL203 **The Rights and Wrongs of Killing People**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, SCIS

Credit only granted for: PHIL209J or PHIL203. Formerly: PHIL209J.

Virtually everyone thinks it's permissible to kill people only in special circumstances. But why is killing usually wrong? Is it ever acceptable to kill an innocent human being intentionally? This course raises these and related questions and examines cases such as terrorism, suicide, abortion, euthanasia, the death penalty, war. Except for a brief discussion of animals, all the controversies considered deal with killing and causing death to human beings.

0101	Sungwon Woo TuTh 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 25) MMH 1400 PLS 1119	Discussion
0102	Sungwon Woo TuTh 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 25) MMH 1400 PLS 1117	Discussion
0103	Sungwon Woo TuTh 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 25) MMH 1400 PLS 1117	Discussion
0104	Sungwon Woo TuTh 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 25) MMH 1400 ASY 3215	Discussion
0105	Sungwon Woo TuTh 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 25) MMH 1400 JMZ 2120	Discussion
0106	Sungwon Woo TuTh 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 25) MMH 1400 CHE 2145	Discussion

PHIL209G **Philosophical Issues; Philosophy & Sports**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An examination of selected philosophical issues of general interest.

0101	Harjit Bhogal TuTh 3:30pm - 4:45pm	Seats (Total: 30) HBK 1108

PHIL209X **Philosophical Issues; Philosophy of Language and Logic**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An examination of selected philosophical issues of general interest.

Contact department for information to register for this course.

PHIL220 **Bioethics: Regulating Right and Wrong**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DSSP

Credit only granted for: PHIL209A or PHIL220. Formerly: PHIL209A.

Bioethicists formulate ethical guidelines. They answer questions such as: When life-saving health resources are scarce, who should get them? Should we increase supply of one such resource, kidneys, by buying them from living "donors"? If drug trials in developing countries benefit patients who consent to participate, are the trials ethical, even if the same research would be forbidden in the US? If a sick person aims to hasten her death, how, if at all, might her doctor permissibly help her? In this course, students construct and defend ethical rules in four domains: research ethics, allocation of scarce resources, markets in organs, and physician-assisted dying.

0101	Samuel Kerstein TuTh 8:00am - 8:50am F 10:00am - 10:50am	Seats (Total: 25) SQH 1120 PLS 1146	Discussion
0102	Samuel Kerstein TuTh 8:00am - 8:50am F 11:00am - 11:50am	Seats (Total: 25) SQH 1120 HBK 0125	Discussion
0103	Samuel Kerstein TuTh 8:00am - 8:50am F 1:00pm - 1:50pm	Seats (Total: 25) SQH 1120 PLS 1111	Discussion

PHIL220H **Bioethics: Regulating Right and Wrong**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DSSP

Credit only granted for: PHIL209A or PHIL220. Formerly: PHIL209A.

Bioethicists formulate ethical guidelines. They answer questions such as: When life-saving health resources are scarce, who should get them? Should we increase supply of one such resource, kidneys, by buying them from living "donors"? If drug trials in developing countries benefit patients who consent to participate, are the trials ethical, even if the same research would be forbidden in the US? If a sick person aims to hasten her death, how, if at all, might her doctor permissibly help her? In this course, students construct and defend ethical rules in four domains: research ethics, allocation of scarce resources, markets in organs, and physician-assisted dying.

Restricted to Honors students.

0101	Samuel Kerstein TuTh 8:00am - 8:50am F 11:00am - 11:50am	Seats (Total: 25) SQH 1120 CCC 1205	Discussion

PHIL261 **Philosophy of the Environment**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: IE | General Education: DSHU

Credit only granted for: HONR218F or PHIL261. Formerly: HONR218F.

An evaluation of different kinds of arguments for the claim that the natural environment should be preserved. Perspectives cut across the disciplines of philosophy (environmental ethics and philosophies of nature); economics (cost-benefit analysis); and biology (evolution, ecology, environmental studies).

0101	Brian Kogelmann MW 8:00am - 8:50am F 10:00am - 10:50am	Seats (Total: 21) TYD 1101 PHY 4222	Discussion
0102	Brian Kogelmann MW 8:00am - 8:50am F 12:00pm - 12:50pm	Seats (Total: 22) TYD 1101 PLS 1162	Discussion
0103	Brian Kogelmann MW 8:00am - 8:50am F 1:00pm - 1:50pm	Seats (Total: 22) TYD 1101 PLS 1162	Discussion

PHIL269M **Special Topics in Study Abroad II; Moral Philosophy**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

PHIL269Y **Special Topics in Study Abroad II; Truth and Reality**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

PHIL269Z **Special Topics in Study Abroad II; Introduction to Continental Philosophy**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

PHIL282 **Free Will & Determinism**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO | General Education: DSHU

A study of the main positions and arguments in the free will debate in contemporary analytic philosophy.

0101	Patricia Greenspan TuTh 12:30pm - 1:20pm F 10:00am - 10:50am	Seats (Total: 21) LEF 2166 CHE 2118	 Discussion
0102	Patricia Greenspan TuTh 12:30pm - 1:20pm F 11:00am - 11:50am	Seats (Total: 22) LEF 2166 CHE 2118	 Discussion
0103	Patricia Greenspan TuTh 12:30pm - 1:20pm F 1:00pm - 1:50pm	Seats (Total: 22) LEF 2166 CHE 2136	 Discussion

PHIL308Y **Studies in Contemporary Philosophy; Philosophy of Race**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Problems, issues, and points of view of current interest in philosophy.

This course explores philosophical questions related to race and ethnicity, with particular emphasis on race and ethnicity in the United States. Topics include race concepts, 'scientific racism', and ethical issues related to racial injustice.

0101	Javiera Perez-Gomez Class time/details on ELMs	Seats (Total: 30) ONLINE	

PHIL309P **Philosophical Problems; Philosophy Politics and Economics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

A focused study of a contemporary philosophical problem or issue. Topics will vary, but the course will encourage students to to generate critical analyses or proposed resolutions of issues in the contemporary philosophical literature.

0101	Jacob Steen MW 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 30) HBK 0123 ONLINE	 Discussion

PHIL318B **Studies in Epistemology/Metaphysics; The Wisdom of Crowds**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Problems, issues, and points of view in epistemology or metaphysics.

0101	Daniel Blair	Seats (Total: 30)	
	MW 1:00pm - 1:50pm Class time/details on ELMs	HBK 1108 ONLINE	

PHIL318D **Studies in Epistemology/Metaphysics; Philosophy & Chomsky's Linguistics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Problems, issues, and points of view in epistemology or metaphysics.

0101	Georges Rey	Seats (Total: 30)	
	TuTh 5:00pm - 6:15pm	SKN 1115	

PHIL320 **Modern Philosophy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in PHIL courses.

A study of major philosophical issues of the 16th, 17th, and 18th centuries through an examination of such philosophers as Descartes, Newton, Hume, and Kant.

0101	Shen Pan	Seats (Total: 30)	
	MW 4:00pm - 5:15pm	KEY 0126	

PHIL328C **Studies in the History of Philosophy; Confucian Philosophy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Problems, issues, and points of view in the history of philosophy.

0101	Sungwon Woo	Seats (Total: 30)	
	TuTh 3:30pm - 4:20pm Class time/details on ELMs	KEY 1117 ONLINE	Discussion

PHIL360 **Philosophy of Language**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 2 courses in PHIL; and (PHIL170 or PHIL370). Or permission of ARHU-Philosophy department. Also offered as: LING350. Credit only granted for: LING350 or PHIL360.

An inquiry into the nature and function of language and other forms of symbolism.

0101	Alexander Williams	Seats (Total: 20)
	TuTh 9:30am - 10:45am	KEY 0103

PHIL364 **Metaphysics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in PHIL courses. Formerly: PHIL464.

The study of some central metaphysical concepts and issues including th nature and validity of metaphysical thinking, universals, identity, substance, time, God, and reality.

0101	Harjit Bhogal	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	LEF 1201

PHIL366 **Philosophy of Mind**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in PHIL courses.

An introduction to core issues in the philosophy of mind, focusing especially on the basic metaphysical question of dualism versus physicalism.

0101	Georges Rey	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	SQH 1121

PHIL386 **Experiential Learning**

(Perm req)

Credits: 6 Grading Method: Regular, Pass-Fail

Restriction: Permission of ARHU-Philosophy department; and junior standing or higher.

Consult Director of Undergraduate Studies: R. Singpurwalla, rgks@umd.edu. Prerequisites: 12 credit hours of philosophy and 3.0 GPA. Carries no credit toward philosophy major.

Contact department for information to register for this course.

PHIL408Q **Topics in Contemporary Philosophy; Virtue**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive examination of contemporary problems and issues. Source material will be selected from recent books and articles.

What sort of person should I be? What sort of life should I live? How should I treat others? This course will address these questions by engaging with the work of virtue ethicists from ancient Greece to the current day, focusing particularly on what contemporary virtue ethics has to say about personal character and its relation to human flourishing.

0101	Kelsey Gipe	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

PHIL418C **Topics in Epistemology/Metaphysics; We're in this Together: Minds, Morality and Getting Along**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive examination of contemporary problems and issues in epistemology or metaphysics. Source material will be selected from recent books and articles.

A study of moral attitudes (e.g. forgiveness, toleration, contempt), cognitive processes (e.g. outgroup/ingroup bias, confirmation bias, common knowledge), and group dynamics (e.g. conventions, trend-setting) underlying social division and cohesion.

0101	Julius Schoenherr	Seats (Total: 25)
	MW 2:00pm - 3:15pm	MTH 0307

PHIL418E **Topics in Epistemology/Metaphysics; Causes and Conditionals**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive examination of contemporary problems and issues in epistemology or metaphysics. Source material will be selected from recent books and articles.

An examination of a perennial topic in metaphysics: the nature of causation. We will pay special attention to analyses of causation in terms of counterfactual statements such as "if the key had been turned the engine would have started" and "if the stone had not been thrown, the glass would not have shattered."

0101	Daniel Blair	Seats (Total: 25)	
	MW 3:00pm - 4:15pm	KEY 0123	

PHIL443 **Moral Psychology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 2 courses in PHIL. Recommended: PHIL341 is strongly recommended for background on the historical authors that the readings make reference to. Credit only granted for: PHIL408P or PHIL443. Formerly: PHIL408P.

Philosophers often stress reasoning as the appropriate source for practical and moral action. Would a realistic view of human psychology undermine this assumption? This course will examine recent philosophical and empirical work on the relevance of emotion and/or intuition to rationality, moral worth, and moral judgment.

0101	Kelsey Gipe	Seats (Total: 25)	
	Class time/details on ELMs	ONLINE	

PHIL445 **Contemporary Political Philosophy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must have completed 3 credits in philosophy or political theory; or permission of ARHU-Philosophy department. And sophomore standing or higher.

Major trends in contemporary political philosophy: liberal, libertarian communitarian, socialist, feminist.

0101	Brian Kogelmann	Seats (Total: 25)	
	MW 10:00am - 10:50am	WDS 0104	
	Class time/details on ELMs	ONLINE	Discussion

PHIL469Y **Study Abroad Special Topics IV; Philosophy of Science II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

PHIL470 **Logical Theory**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: PHIL370; or permission of instructor.

This course will treat a selection of the most important topics in modern logic: alternative proof-theoretic presentations of logical systems, completeness proofs for classical propositional and first-order logic, some basic computability theory, basic limitative results (such as Godel's incompleteness theorems), and some results concerning second-order logic. The primary focus of the course is a study of these fundamental topics, but we will also discuss some of the philosophical issues they raise.

0101	Eric Pacuit	Seats (Total: 25)	
	MW 10:00am - 10:50am Class time/details on ELMs	SQH 2120 ONLINE	Discussion

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PHIL498F **Topical Investigations; Topical Investigation**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite:Two courses in philosophy or permission of the department.

Contact department for information to register for this course.

PHIL498G **Topical Investigations; Topical Investigation**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite:Two courses in philosophy or permission of the department.

Contact department for information to register for this course.

PHIL498Z **Topical Investigations; Realism and Idealism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

PHIL640 **Value Theory**

Credits: 3 Grading Method: Regular, Audit

A basic course in value theory for beginning graduate students, coverin a number of topics in depth, to provide a springboard for further study and research in the area.

0101	Patricia Greenspan	Seats (Total: 15)	
	Tu 3:30pm - 6:00pm	SKN 1116	

PHIL788G **Research in Philosophy; Research in Philosophy**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Contact department for information to register for this course.

PHIL788I **Research in Philosophy; Research in Philosophy**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Contact department for information to register for this course.

PHIL799 **Master's Thesis Research; Masters Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

PHIL828K **Seminar in the History of Philosophy**

Credits: 3 Grading Method: Regular, Audit

0101	Rachel Singpurwalla Th 12:30pm - 3:00pm	Seats (Total: 15) SKN 1116

PHIL848M **Seminar in Ethics**

Credits: 3 Grading Method: Regular, Audit

0101	Dan Moller M 4:30pm - 7:00pm	Seats (Total: 15) SKN 1116

PHIL848N **Seminar in Ethics**

Credits: 3 Grading Method: Regular, Audit

0101	Christopher Morris W 2:00pm - 4:30pm	Seats (Total: 15) SKN 1116

PHIL858P **Seminar in Logic and Philosophy of Sciences**

Credits: 3 Grading Method: Regular, Audit

0101	Eric Pacuit	Seats (Total: 15)
	M 2:00pm - 4:30pm	SKN 1116

PHIL888 **Professional Mentoring for Doctoral Students**

Credits: 1-3 Grading Method: Sat-Fail

Work with a faculty advisor on various aspects of professional development.

Contact department for information to register for this course.

PHIL889 **Pedagogical Mentoring for Doctoral Students**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Work with a faculty advisor to develop and improve pedagogical skills.

Contact department for information to register for this course.

PHIL898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

PHIL899 **Doctoral Dissertation Research; Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

PHSC Public Health Science Spring 2019

PHSC389 **Independent Research Study in Public Health Science**

(Perm req)

Credits: 1-6 Grading Method: Regular

This independent research-based experience will provide the opportunity for students to work with individual research mentors in the area of Public Health Science. Students must identify a mentor prior to obtaining departmental permission.

0101	Nancy Smith	Seats (Total: 30)
	Contact instructor or department for details.	
	Restricted to students in Public Health Science (12140) major at College Park only.	
SG91	Nancy Smith	Seats (Total: 15)
	Contact instructor or department for details.	

PHSC399 **Public Health Science Internship**

(Perm req)

Credits: 1-6 Grading Method: Regular

The Public Health Science internship will enable students to gain practical experience under conditions conducive to academic, research and professional development. The internship is a time-limited, supervised period of public health professional experience carried out in a related professional organization or research setting.

0101	Nancy Smith	Seats (Total: 30)	
	Contact instructor or department for details.		
	Restricted to College Park students in the Public Health Science major (code 12140).		
SG91	Nancy Smith	Seats (Total: 20)	
	Contact instructor or department for details.		
	Restricted to Shady Grove Students in the Public Health Science major (code 12140).		

PHSC401 **History of Public Health**

Credits: 3 Grading Method: Regular

Restriction: Must be in Public Health Science program; and must have earned a minimum of 45 credits. Credit only granted for: PHSC401 or SPHL401. Formerly: SPHL401.

Emphasis is on the history of public health in the Western world from antiquity to the present. Also examines the influence of public health developments as they relate to the Western world as well as throughout diverse cultures and societies across the globe. Analysis focuses on the interaction among Western and non-Western cultures with respect to health issues, including science, policies, prevention and treatment.

0101	John Calhoun	Seats (Total: 21)	
	TuTh 3:30pm - 4:45pm M 9:00am - 9:50am	SPH 1312 SPH 0307	Discussion
	Restricted to College Park students in the Public Health Science major (code 12140).		
0102	John Calhoun	Seats (Total: 21)	
	TuTh 3:30pm - 4:45pm M 10:00am - 10:50am	SPH 1312 SPH 0307	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0103	John Calhoun	Seats (Total: 21)	
	TuTh 3:30pm - 4:45pm M 11:00am - 11:50am	SPH 1312 SPH 0307	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		

0104	John Calhoun TuTh 3:30pm - 4:45pm M 12:00pm - 12:50pm	Seats (Total: 21) SPH 1312 SPH 0307	 Discussion

Restricted to College Park students in the Public Health Science major (code: 12140).

PHSC402 **Public Health Emergency Preparedness**

Credits: 3 Grading Method: Regular

Restriction: Must be in Public Health Science program; and must have earned a minimum of 60 credits. Credit only granted for: PHSC402 or SPHL402. Formerly: SPHL402.

Intensive introduction to public health emergency preparedness. Course will provide students with an overview of the role of public health in planning, prevention, preparedness, response, and recovery from disasters, both manmade and natural.

SG91	Marilyn London W 2:00pm - 4:30pm	Seats (Total: 25) BLD3 2225
SG92	Marilyn London W 2:00pm - 4:30pm	Seats (Total: 10) BLD3 2225

PHSC405 **Policy Advocacy and Public Health**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in PHSC401. Restriction: Must be in Public Health Science program; and must have earned a minimum of 60 credits.

Students will identify and analyze policy solutions to public health problems and determine advocacy strategies to encourage policy makers to implement the recommendations. Lectures, class discussions, group work and mock advocacy exercises will integrate the principles and practice of public health advocacy. Guest lecturers from a variety of settings will give students a broad range of perspectives and advocacy experiences.

0101	Andrew Anderson W 6:00pm - 8:30pm	Seats (Total: 30) BPS 1238

PHSC410 **Public Health Program Planning and Evaluation**

Credits: 3 Grading Method: Regular

Restriction: Must be in Public Health Science program; and junior standing or higher. Credit only granted for: PHSC410 or SPHL410. Formerly: SPHL410.

Students will become familiar with the dynamics of public health program planning, and the basic process of identifying unmet needs. They will be able to identify different types of program evaluation, including needs assessment, formative research, process evaluation, impact assessment, and cost analysis.

0101	Nancy Smith M 5:00pm - 7:30pm	Seats (Total: 35) SPH 0308	

PHSC415 **Essentials of Public Health Biology: The Cell, The Individual, and Disease**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in BSCI202. Recommended: BSCI223. Restriction: Must be in Public Health Science program; and junior standing or higher. Credit only granted for: PHSC415, SPHL415 or SPHL498J. Formerly: SPHL415 and SPHL498J.

Presents the basic scientific and biomedical concepts of modern public health problems and explores in depth mechanisms and models of the major categories of disease. The biologic principles presented are foundations to public health disease prevention, control, or management programs.

0101	Jessica O'Hara MW 1:00pm - 1:50pm W 3:00pm - 3:50pm	Seats (Total: 21) ESJ 2208 ATL 1114	 Discussion
	Restricted to College Park students in the Public Health Science major (code 12140).		
0102	Jessica O'Hara MW 1:00pm - 1:50pm W 4:00pm - 4:50pm	Seats (Total: 21) ESJ 2208 ATL 1114	 Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0104	Jessica O'Hara MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 21) ESJ 2208 ATL 1114	 Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		
0105	Jessica O'Hara MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 21) ESJ 2208 ATL 1114	 Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		

0106	Jessica O'Hara	Seats (Total: 21)	
	MW 1:00pm - 1:50pm	ESJ 2208	
	F 12:00pm - 12:50pm	ATL 1114	Discussion
	Restricted to College Park students in the Public Health Science major (code: 12140).		

PHSC426 **Climate Change and Health**

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in MIEH300. Restriction: Must be in Public Health Science program.

Climate changes pose significant risks to population health by affecting air quality, the availability of safe drinking water, infectious disease transmission, food security, and access to housing, land, and livelihoods. Students examine the relationship between climate change and human health, focusing on how climate change vulnerability varies between populations by geographic, demographic, and socioeconomic characteristics.

0101	Heather Randell	Seats (Total: 35)	
	TuTh 12:30pm - 1:45pm	SPH 0302	

PHSC497 **Public Health Science Capstone**

Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: Must have completed the professional writing requirement with a C- or higher; and minimum grade of C- in MIEH400. Restriction: Must have earned a minimum of 100 credits; and must be in Public Health Science program; and must be in the final semester of undergraduate study. Credit only granted for: SPHL498F or PHSC497. Formerly: SPHL498F.

The capstone course is the culminating experience for Public Health Science students and must be taken only in the final semester of study. The Public Health Science capstone course is designed to challenge students to integrate the five core areas of public health in investigating, researching and addressing public health issues. Throughout the semester, students will be required to evaluate, analyze and synthesize scholarly works as they research and propose solutions to a variety of public health issues. By the conclusion of this research based course, students will understand how the various public health perspectives can combine in addressing and informing public health practices.

0101	Alyssa Brooks	Seats (Total: 22)	
	M 5:00pm - 7:30pm	SPH 0307	
	Restricted to College Park students in the Public Health Science major (code 12140).		
0201	Kevin Glasz	Seats (Total: 22)	
	M 5:00pm - 7:30pm	ATL 2316	
	Restricted to College Park students in the Public Health Science major (code 12140).		

0301	Allison Hanley Tu 4:00pm - 6:30pm	Seats (Total: 22) SPH 0303
	Restricted to College Park students in the Public Health Science major (code 12140).	
0501	Ellesse-Roselee Akre W 6:00pm - 8:30pm	Seats (Total: 22) WDS 0104
	Restricted to College Park students in the Public Health Science major (code 12140).	
0601	Kendall Bustad W 4:00pm - 6:30pm	Seats (Total: 22) ATL 2316
	Restricted to College Park students in the Public Health Science major (code 12140).	
0701	John Calhoun Th 5:15pm - 7:45pm	Seats (Total: 22) AJC 2119
	Restricted to College Park students in the Public Health Science major (code 12140).	
0801	Eric Boyle Th 6:00pm - 8:30pm	Seats (Total: 22) ATL 0201
	Restricted to College Park students in the Public Health Science major (code 12140).	
0901	Eric Boyle W 4:00pm - 6:30pm	Seats (Total: 20) SPH 0308
	Restricted to College Park students in the Public Health Science major (code 12140).	
1001	John Calhoun Tu 5:15pm - 7:45pm	Seats (Total: 22) ATL 1114
	Restricted to College Park students in the Public Health Science major (code 12140).	
1201	Liz Bell M 2:00pm - 4:30pm	Seats (Total: 22) ATL 2316
SG91	Alyssa Brooks Tu 5:00pm - 7:30pm	Seats (Total: 20) BLD3 3206
	Restricted to Shady Grove Students in the Public Health Science major (code 12140).	

PHYS Physics Spring 2019

PHYS106 Light, Perception, Photography, and Visual Phenomena

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNL (if taken with PHYS107)

Intended for the general student, this course will cover topics in optics which require minimal use of mathematics. Principles of optics, lenses, cameras, lasers and holography, physics of the eye, color vision and various visual phenomena such as rainbows.

0101	Andris Skuja MWF 2:00pm - 2:50pm	Seats (Total: 155) PHY 1410	

PHYS107 **Light, Perception, Photography and Visual Phenomena Laboratory**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Optional laboratory to accompany PHYS106. Laboratory experiments include geometrical optics (lenses, cameras, eye), optical instruments (telescope, binoculars), photography, perception, color phenomena, and wave phenomena.

0101	Anwar Bhatti M 3:00pm - 4:50pm	Seats (Total: 24) PHY 3214	Lab
0301	Anwar Bhatti Tu 1:00pm - 2:50pm	Seats (Total: 24) PHY 3214	Lab
0501	Anwar Bhatti W 3:00pm - 4:50pm	Seats (Total: 24) PHY 3214	Lab

PHYS111 **Physics in the Modern World**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS

A survey course in general physics emphasizing the role that physics plays in science, technology, and society today. The course is concept oriented and minimal use of mathematics is made. Intended for the general student; does not satisfy the requirements of the professional schools.

Contact department for information to register for this course.

PHYS121 **Fundamentals of Physics I**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: PL | General Education: DSNL

Prerequisite: MATH112 or MATH115. Credit only granted for: PHYS121, PHYS131, or PHYS331.

The first part of a two-semester course in general physics treating the fields of mechanics, heat, sound, electricity, magnetism, optics, and modern physics. Together with PHYS122, this generally satisfies the minimum requirement of medical and dental schools.

Physics Clinic, PHY 1214, MTWHF 12,2. If purchasing used books additional software may be required. Students must pay a $50.00 lab materials fee.

0301	Negar Heidarian Boroujeni	Seats (Total: 28)	
	MWF 3:00pm - 3:50pm	PHY 1412	
	M 11:00am - 12:50pm	PHY 3306	Lab
	M 10:00am - 10:50am	PLS 1113	Discussion
0302	Negar Heidarian Boroujeni	Seats (Total: 28)	
	MWF 3:00pm - 3:50pm	PHY 1412	
	Tu 1:00pm - 2:50pm	PHY 3306	Lab
	Tu 12:00pm - 12:50pm	HBK 1112	Discussion
0303	Negar Heidarian Boroujeni	Seats (Total: 28)	
	MWF 3:00pm - 3:50pm	PHY 1412	
	Th 12:00pm - 1:50pm	PHY 3306	Lab
	Th 11:00am - 11:50am	ATL 2352	Discussion
0304	Negar Heidarian Boroujeni	Seats (Total: 28)	
	MWF 3:00pm - 3:50pm	PHY 1412	
	Th 4:00pm - 5:50pm	PHY 3306	Lab
	Th 3:00pm - 3:50pm	MTH 0106	Discussion
0305	Negar Heidarian Boroujeni	Seats (Total: 28)	
	MWF 3:00pm - 3:50pm	PHY 1412	
	Tu 5:00pm - 6:50pm	PHY 3306	Lab
	Tu 4:00pm - 4:50pm	MTH 0401	Discussion
0306	Negar Heidarian Boroujeni	Seats (Total: 28)	
	MWF 3:00pm - 3:50pm	PHY 1412	
	Tu 10:00am - 11:50am	PHY 3306	Lab
	Tu 9:00am - 9:50am	PHY 4221	Discussion
0307	Negar Heidarian Boroujeni	Seats (Total: 28)	
	MWF 3:00pm - 3:50pm	PHY 1412	
	W 11:00am - 12:50pm	PHY 3306	Lab
	W 10:00am - 10:50am	PHY 1402	Discussion

0308	Negar Heidarian Boroujeni MWF 3:00pm - 3:50pm Tu 7:00pm - 8:50pm Tu 6:00pm - 6:50pm	Seats (Total: 28) PHY 1412 PHY 3306 PHY 1402	 Lab Discussion
0401	Negar Heidarian Boroujeni M 7:00pm - 8:50pm W 7:00pm - 7:50pm M 5:00pm - 6:50pm W 8:00pm - 8:50pm	Seats (Total: 28) PHY 1410 PHY 1410 PHY 3306 PHY 1204	 Lab Discussion
0402	Negar Heidarian Boroujeni M 7:00pm - 8:50pm W 7:00pm - 7:50pm W 8:00pm - 9:50pm M 9:00pm - 9:50pm	Seats (Total: 21) PHY 1410 PHY 1410 PHY 3306 PHY 1219	 Lab Discussion
0403	Negar Heidarian Boroujeni M 7:00pm - 8:50pm W 7:00pm - 7:50pm W 5:00pm - 6:50pm W 4:00pm - 4:50pm	Seats (Total: 28) PHY 1410 PHY 1410 PHY 3306 MTH 0104	 Lab Discussion
0405	Negar Heidarian Boroujeni M 7:00pm - 8:50pm W 7:00pm - 7:50pm Th 6:00pm - 7:50pm Th 5:00pm - 5:50pm	Seats (Total: 28) PHY 1410 PHY 1410 PHY 3306 PHY 1402	 Lab Discussion
SES1	Negar Heidarian Boroujeni M 7:00pm - 8:50pm W 7:00pm - 7:50pm W 8:00pm - 9:50pm M 9:00pm - 9:50pm *Restricted to students in the SIE Program. Click here for more information.*	Seats (Total: 5) PHY 1410 PHY 1410 PHY 3306 PHY 1219	 Lab Discussion

PHYS122 **Fundamentals of Physics II**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: PL | General Education: DSNL

Prerequisite: PHYS121; or students who have taken courses with comparable content may contact the department. Credit only granted for: PHYS122, PHYS132, or PHYS332.

A continuation of PHYS121, which together with it, generally satisfies the minimum requirement of medical and dental schools.

Physics Clinic, PHY 1214, MTWHF 11,2. If purchasing used books additional software may be required. Students must pay a $50.00 lab materials fee.

0301	Negar Heidarian Boroujeni	Seats (Total: 24)	
	TuTh 3:30pm - 4:45pm	PHY 1410	
	Th 10:00am - 11:50am	PHY 3314	Lab
	Th 9:00am - 9:50am	HBK 0109	Discussion
0302	Negar Heidarian Boroujeni	Seats (Total: 24)	
	TuTh 3:30pm - 4:45pm	PHY 1410	
	Th 12:00pm - 1:50pm	PHY 3314	Lab
	Th 11:00am - 11:50am	CHM 0122	Discussion
0303	Negar Heidarian Boroujeni	Seats (Total: 24)	
	TuTh 3:30pm - 4:45pm	PHY 1410	
	M 2:00pm - 3:50pm	PHY 3314	Lab
	M 1:00pm - 1:50pm	PHY 0405	Discussion
0304	Negar Heidarian Boroujeni	Seats (Total: 24)	
	TuTh 3:30pm - 4:45pm	PHY 1410	
	W 2:00pm - 3:50pm	PHY 3314	Lab
	W 1:00pm - 1:50pm	PHY 1204	Discussion
0502	Negar Heidarian Boroujeni	Seats (Total: 24)	
	Tu 7:00pm - 8:50pm	PHY 1410	
	Th 7:00pm - 7:50pm	PHY 1410	
	Tu 5:00pm - 6:50pm	PHY 3314	Lab
	Tu 4:00pm - 4:50pm	MTH 0106	Discussion
0503	Negar Heidarian Boroujeni	Seats (Total: 24)	
	Tu 7:00pm - 8:50pm	PHY 1410	
	Th 7:00pm - 7:50pm	PHY 1410	
	M 7:00pm - 8:50pm	PHY 3314	Lab
	M 6:00pm - 6:50pm	PHY 0405	Discussion

SES1	Negar Heidarian Boroujeni	Seats (Total: 24)	
	Tu 7:00pm - 8:50pm	PHY 1410	
	Th 7:00pm - 7:50pm	PHY 1410	
	Th 8:00pm - 9:50pm	PHY 3314	Lab
	Tu 9:00pm - 9:50pm	PHY 1402	Discussion
	Restricted to students in the SIE Program. Click here for more information.		

PHYS131 **Fundamentals of Physics for Life Sciences I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131; and (MATH131 or MATH136); and (BSCI160 and BSCI161; or BSCI106); and (BSCI170 and BSCI171; or BSCI105). Or students who have taken courses with comparable content may contact the department. Credit only granted for: PHYS121, PHYS131, or PHYS331.

The first part of a two-semester course in general physics specifically oriented towards applications relevant for students in biology and pre-medical programs. The course covers basic mechanics including forces and energy, properties of matter, and thermodynamics done in authentic biological contexts.

Students must pay a $50.00 lab materials fee.

0101	David Buehrle	Seats (Total: 24)	
	TuTh 11:00am - 12:15pm	PHY 1410	
	W 10:00am - 11:50am	PHY 3310	Lab
	W 9:00am - 9:50am	PHY 3310	Discussion
0102	David Buehrle	Seats (Total: 24)	
	TuTh 11:00am - 12:15pm	PHY 1410	
	M 10:00am - 11:50am	PHY 3310	Lab
	M 9:00am - 9:50am	PHY 3310	Discussion
0103	David Buehrle	Seats (Total: 24)	
	TuTh 11:00am - 12:15pm	PHY 1410	
	Th 3:00pm - 4:50pm	PHY 3310	Lab
	Th 2:00pm - 2:50pm	PHY 3310	Discussion
0104	David Buehrle	Seats (Total: 21)	
	TuTh 11:00am - 12:15pm	PHY 1410	
	M 7:00pm - 8:50pm	PHY 3310	Lab
	M 6:00pm - 6:50pm	PHY 3310	Discussion

0201	David Buehrle	Seats (Total: 24)	
	MWF 11:00am - 11:50am	PHY 1410	
	Tu 10:00am - 11:50am	PHY 3310	Lab
	Tu 9:00am - 9:50am	PHY 3310	Discussion
0202	David Buehrle	Seats (Total: 24)	
	MWF 11:00am - 11:50am	PHY 1410	
	W 3:00pm - 4:50pm	PHY 3310	Lab
	W 2:00pm - 2:50pm	PHY 3310	Discussion
0203	David Buehrle	Seats (Total: 24)	
	MWF 11:00am - 11:50am	PHY 1410	
	M 3:00pm - 4:50pm	PHY 3310	Lab
	M 2:00pm - 2:50pm	PHY 3310	Discussion
0204	David Buehrle	Seats (Total: 3)	
	MWF 11:00am - 11:50am	PHY 1410	
	M 7:00pm - 8:50pm	PHY 3310	Lab
	M 6:00pm - 6:50pm	PHY 3310	Discussion

PHYS132 **Fundamentals of Physics for Life Sciences II**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS131; or students who have taken courses with comparable content may contact the department. Credit only granted for: PHYS122, PHYS132, or PHYS332.

The second part of a two-semester course in general physics specifically oriented towards applications relevant for students in biology and pre-medical programs. The course covers basic statistical physics, electricity and magnetism, and optics done in authentic biological contexts.

Students must pay a $50.00 lab materials fee.

0101	Mary Chessey	Seats (Total: 24)	
	MWF 10:00am - 10:50am	ESJ 0224	
	M 12:00pm - 1:50pm	PHY 3312	Lab
	M 11:00am - 11:50am	PHY 3312	Discussion
0102	Mary Chessey	Seats (Total: 24)	
	MWF 10:00am - 10:50am	ESJ 0224	
	W 12:00pm - 1:50pm	PHY 3312	Lab
	W 11:00am - 11:50am	PHY 3312	Discussion

0103	Mary Chessey	Seats (Total: 24)	
	MWF 10:00am - 10:50am	ESJ 0224	
	Tu 12:00pm - 1:50pm	PHY 3312	Lab
	Tu 11:00am - 11:50am	PHY 3312	Discussion
0104	Mary Chessey	Seats (Total: 24)	
	MWF 10:00am - 10:50am	ESJ 0224	
	Tu 3:00pm - 4:50pm	PHY 3312	Lab
	Tu 2:00pm - 2:50pm	PHY 3312	Discussion
0105	Mary Chessey	Seats (Total: 24)	
	MWF 10:00am - 10:50am	ESJ 0224	
	Th 9:00am - 10:50am	PHY 3312	Lab
	Th 8:00am - 8:50am	PHY 3312	Discussion
0106	Mary Chessey	Seats (Total: 24)	
	MWF 10:00am - 10:50am	ESJ 0224	
	Th 12:00pm - 1:50pm	PHY 3312	Lab
	Th 11:00am - 11:50am	PHY 3312	Discussion
0201	William Dorland	Seats (Total: 24)	
	TuTh 12:30pm - 1:45pm	PHY 1412	
	Tu 9:00am - 10:50am	PHY 3312	Lab
	Tu 8:00am - 8:50am	PHY 3312	Discussion
0202	William Dorland	Seats (Total: 23)	
	TuTh 12:30pm - 1:45pm	PHY 1412	
	W 3:00pm - 4:50pm	PHY 3312	Lab
	W 2:00pm - 2:50pm	PHY 3312	Discussion
0203	William Dorland	Seats (Total: 22)	
	TuTh 12:30pm - 1:45pm	PHY 1412	
	M 3:00pm - 4:50pm	PHY 3312	Lab
	M 2:00pm - 2:50pm	PHY 3312	Discussion
0204	William Dorland	Seats (Total: 24)	
	TuTh 12:30pm - 1:45pm	PHY 1412	
	W 9:00am - 10:50am	PHY 3312	Lab
	W 8:00am - 8:50am	PHY 3312	Discussion

0205	William Dorland TuTh 12:30pm - 1:45pm Th 3:00pm - 4:50pm Th 2:00pm - 2:50pm	Seats (Total: 23) PHY 1412 PHY 3312 PHY 3312	 Lab Discussion

PHYS161 **General Physics: Mechanics and Particle Dynamics**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNS

Prerequisite: Must have completed or be concurrently enrolled in MATH141. Credit only granted for: PHYS141, PHYS161, or PHYS171.

First semester of a three-semester calculus-based general physics course. Laws of motion, force, and energy; principles of mechanics, collisions, linear momentum, rotation, and gravitation.

Physics Clinic, PHY 1214, MTWHF 11, 1, 2. If purchasing used books additional software may be required.

0101	David Buehrle TuTh 2:00pm - 3:15pm M 9:00am - 9:50am	Seats (Total: 30) PHY 1412 PHY 1219	 Discussion
0102	David Buehrle TuTh 2:00pm - 3:15pm W 4:00pm - 4:50pm	Seats (Total: 30) PHY 1412 MTH 0105	 Discussion
0103	David Buehrle TuTh 2:00pm - 3:15pm F 9:00am - 9:50am	Seats (Total: 30) PHY 1412 PHY 0405	 Discussion
0104	David Buehrle TuTh 2:00pm - 3:15pm F 10:00am - 10:50am	Seats (Total: 30) PHY 1412 PHY 1204	 Discussion
0105	David Buehrle TuTh 2:00pm - 3:15pm M 9:00am - 9:50am	Seats (Total: 30) PHY 1412 PHY 1204	 Discussion
0106	David Buehrle TuTh 2:00pm - 3:15pm M 3:00pm - 3:50pm	Seats (Total: 30) PHY 1412 MTH 0304	 Discussion

0107	David Buehrle TuTh 2:00pm - 3:15pm M 4:00pm - 4:50pm	Seats (Total: 30) PHY 1412 MTH 0101	Discussion
0108	David Buehrle TuTh 2:00pm - 3:15pm W 4:00pm - 4:50pm	Seats (Total: 30) PHY 1412 PHY 1219	Discussion
0109	David Buehrle TuTh 2:00pm - 3:15pm M 4:00pm - 4:50pm	Seats (Total: 30) PHY 1412 PHY 1219	Discussion
0110	David Buehrle TuTh 2:00pm - 3:15pm M 3:00pm - 3:50pm	Seats (Total: 30) PHY 1412 PHY 1219	Discussion
0301	David Buehrle MWF 2:00pm - 2:50pm Tu 3:00pm - 3:50pm	Seats (Total: 33) PHY 1412 MTH 0106	Discussion
0302	David Buehrle MWF 2:00pm - 2:50pm Tu 4:00pm - 4:50pm	Seats (Total: 34) PHY 1412 PHY 1204	Discussion
0303	David Buehrle MWF 2:00pm - 2:50pm Th 4:00pm - 4:50pm	Seats (Total: 34) PHY 1412 PHY 1219	Discussion
0304	David Buehrle MWF 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 34) PHY 1412 MTH 0101	Discussion
0305	David Buehrle MWF 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 34) PHY 1412 EGR 2154	Discussion
0306	David Buehrle MWF 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 35) PHY 1412 PHY 1204	Discussion

0307	David Buehrle MWF 2:00pm - 2:50pm Th 3:00pm - 3:50pm	Seats (Total: 34) PHY 1412 MTH 0304	Discussion
0308	David Buehrle MWF 2:00pm - 2:50pm Tu 4:00pm - 4:50pm	Seats (Total: 33) PHY 1412 MTH 0103	Discussion
0309	David Buehrle MWF 2:00pm - 2:50pm Th 4:00pm - 4:50pm	Seats (Total: 34) PHY 1412 PHY 1204	Discussion
0401	Raymond Fermo M 7:00pm - 8:50pm W 7:00pm - 7:50pm W 8:00pm - 8:50pm	Seats (Total: 33) PHY 1412 PHY 1412 PHY 1219	Discussion
0402	Raymond Fermo M 7:00pm - 8:50pm W 7:00pm - 7:50pm W 6:00pm - 6:50pm	Seats (Total: 33) PHY 1412 PHY 1412 PHY 1219	Discussion
0403	Raymond Fermo M 7:00pm - 8:50pm W 7:00pm - 7:50pm M 6:00pm - 6:50pm	Seats (Total: 33) PHY 1412 PHY 1412 PHY 1219	Discussion
0405	Raymond Fermo M 7:00pm - 8:50pm W 7:00pm - 7:50pm Tu 7:00pm - 7:50pm	Seats (Total: 33) PHY 1412 PHY 1412 PHY 1219	Discussion

PHYS165 **Introduction to Programming in the Physical Sciences**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS171, PHYS141, or PHYS161; or must have scored 3 or higher on AP PHYS exam.

Introduction to programming using examples in the physical sciences. Provides instruction in the techniques of upper-level languages such as Fortran, C, and Pascal, as well as an introduction to the object oriented programming techniques used in Python, C++ and Java. Includes strong component of visualization and graphing.

0101	James Williams MWF 11:00am - 11:50am	Seats (Total: 60) CHE 2108	

PHYS171 **Introductory Physics: Mechanics and Relativity**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: PS | General Education: DSNS

Prerequisite: (MATH140; and a high school physics course); or permission of CMNS-Physics department. And must have completed or be concurrently enrolled in MATH141. Credit only granted for: PHYS141, PHYS161, or PHYS171.

First semester of a three semester sequence for physics majors and those desiring a rigorous preparation in the physical sciences: kinematics, Newton's laws, energy and work, linear and angular momenta, temperature and pressure, ideal gas law, and special relativity.

0101	Rajarshi Roy TuTh 12:30pm - 1:45pm M 10:00am - 10:50am	Seats (Total: 50) PHY 1204 ESJ 0215	

PHYS174 **Physics Laboratory Introduction**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Corequisite: MATH140. Recommended: High school physics.

Introduces students to the techniques of data gathering and analysis. This course will lay a foundation for higher-level labs in physics and the physical sciences. Students will learn to use laboratory equipment such as calipers, meters, oscilloscopes, and computer interfaces. Techniques of measurement and error analysis will be presented. Students will be taught to use the computer for data analysis with an emphasis on using spreadsheets.

0201	Theodore Einstein Tu 11:00am - 12:50pm	Seats (Total: 26) PHY 3115	Lab
0301	Theodore Einstein W 1:00pm - 2:50pm	Seats (Total: 26) PHY 3115	Lab
0401	Theodore Einstein W 3:00pm - 4:50pm	Seats (Total: 26) PHY 3115	Lab

PHYS204 **Workforce Skills for Physics Undergraduates**

(Perm req)

Credits: 2

Grading Method: Regular, Pass-Fail

Prerequisite: PHYS171 and PHYS174; or permission of instructor. Restriction: Permission of CMNS-Physics department.

Introduces students to skills and methods needed to join the workforce. Developed for majors, the course includes skills assessments, identifying careers, networking opportunities, job search strategies, resume building and mock interviews, and a culminating portfolio.

0101	Donna Hammer Tu 3:30pm - 4:45pm Contact instructor or department for details.	Seats (Total: 10) PHY 1309	

PHYS205 **Developing Essential Research Skills**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail

Prerequisite: PHYS171 and PHYS174; or permission of instructor. Restriction: Permission of CMNS-Physics department.

Introduces students to the skills needed to become successful researchers. The course includes research experience, an introduction to programming, scientific reading and writing, presentation development and formal poster presentation.

0101	Donna Hammer, Logan Anbinder Th 3:30pm - 4:45pm Contact instructor or department for details.	Seats (Total: 10) PHY 1309	

PHYS260 **General Physics: Vibration, Waves, Heat, Electricity and Magnetism**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSNL (if taken with PHYS261)

Prerequisite: PHYS161 and MATH141. Corequisite: PHYS261. Credit only granted for: PHYS142, PHYS260, or PHYS272.

Second semester of a three-semester calculus-based general physics course. Vibrations, waves, fluids; heat, kinetic theory, and thermodynamics; electrostatics, circuits, and magnetism. PHYS260 and PHYS261 must be taken in the same semester.

If purchasing used books additional software may be required.

0101	Hailu Gebremariam MWF 10:00am - 10:50am W 2:00pm - 2:50pm	Seats (Total: 30) PHY 1410 PHY 1219	 Discussion

0102	Hailu Gebremariam MWF 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 30) PHY 1410 MTH 0106	Discussion
0201	Hailu Gebremariam MW 4:00pm - 5:15pm Tu 11:00am - 11:50am	Seats (Total: 35) PHY 1412 ITV 1111	Discussion
0202	Hailu Gebremariam MW 4:00pm - 5:15pm W 8:00am - 8:50am	Seats (Total: 34) PHY 1412 PHY 0405	Discussion
0203	Hailu Gebremariam MW 4:00pm - 5:15pm W 9:00am - 9:50am	Seats (Total: 35) PHY 1412 PHY 0405	Discussion
0204	Hailu Gebremariam MW 4:00pm - 5:15pm F 8:00am - 8:50am	Seats (Total: 34) PHY 1412 PHY 1204	Discussion
0205	Hailu Gebremariam MW 4:00pm - 5:15pm Tu 4:00pm - 4:50pm	Seats (Total: 35) PHY 1412 PHY 1219	Discussion
0206	Hailu Gebremariam MW 4:00pm - 5:15pm F 9:00am - 9:50am	Seats (Total: 35) PHY 1412 PHY 1204	Discussion
0301	Hailu Gebremariam MWF 3:00pm - 3:50pm M 12:00pm - 12:50pm	Seats (Total: 35) PHY 1410 MTH 0303	Discussion
0302	Hailu Gebremariam MWF 3:00pm - 3:50pm Th 11:00am - 11:50am	Seats (Total: 35) PHY 1410 ITV 1111	Discussion
0303	Hailu Gebremariam MWF 3:00pm - 3:50pm F 1:00pm - 1:50pm	Seats (Total: 35) PHY 1410 PHY 1219	Discussion

0304	Hailu Gebremariam MWF 3:00pm - 3:50pm F 11:00am - 11:50am	Seats (Total: 34) PHY 1410 MTH 0103	Discussion

PHYS261 **General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (Laboratory)**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Corequisite: PHYS260.

Lab includes experiments on mechanics, vibrations, waves, heat, electricity and magnetism. PHYS260 and PHYS261 (lab) must be taken in the same semester.

Students must pay a $50.00 lab materials fee.

0101	Matthew Severson M 6:00pm - 8:20pm	Seats (Total: 36) PHY 3219	Lab
0102	Matthew Severson M 12:00pm - 2:20pm	Seats (Total: 36) PHY 3219	Lab
0103	Matthew Severson W 6:00pm - 8:20pm	Seats (Total: 36) PHY 3219	Lab
0104	Matthew Severson Tu 2:00pm - 4:20pm	Seats (Total: 36) PHY 3219	Lab
0105	Matthew Severson Tu 5:00pm - 7:20pm	Seats (Total: 36) PHY 3219	Lab
0106	Matthew Severson Th 6:00pm - 8:20pm	Seats (Total: 36) PHY 3219	Lab
0107	Matthew Severson W 11:00am - 1:20pm	Seats (Total: 36) PHY 3219	Lab
0108	Matthew Severson Th 12:00pm - 2:20pm	Seats (Total: 36) PHY 3219	Lab
0109	Matthew Severson Th 9:00am - 11:20am	Seats (Total: 36) PHY 3219	Lab

0110	Matthew Severson Th 3:00pm - 5:20pm	Seats (Total: 36) PHY 3219	Lab

PHYS261M **General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (Laboratory)**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Corequisite: PHYS260.

Lab includes experiments on mechanics, vibrations, waves, heat, electricity and magnetism. PHYS260 and PHYS261 (lab) must be taken in the same semester.

0101	Instructor: TBA Contact instructor or department for details. *Restricted to students transferring a lab grade from a previous semester.*	Seats (Total: 10)

PHYS270 **General Physics: Electrodynamics, Light, Relativity and Modern Physics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNL (if taken with PHYS271)

Prerequisite: PHYS261, MATH241, and PHYS260. Corequisite: PHYS271.

Third semester of a three-semester calculus-based general physics course. Electrodynamics, Maxwell's equations and electromagnetic waves, geometrical optics, interference, diffraction, special theory of relativity, and modern physics. PHYS270 and PHYS271 (lab) must be taken in the same semester.

If purchasing used books additional software may be required.

0101	Hailu Gebremariam MWF 1:00pm - 1:50pm W 2:00pm - 2:50pm	Seats (Total: 33) PHY 1412 MTH 0106	Discussion
0102	Hailu Gebremariam MWF 1:00pm - 1:50pm M 3:00pm - 3:50pm	Seats (Total: 33) PHY 1412 MTH 0303	Discussion
0103	Hailu Gebremariam MWF 1:00pm - 1:50pm W 11:00am - 11:50am	Seats (Total: 33) PHY 1412 PHY 0405	Discussion

0104	Hailu Gebremariam MWF 1:00pm - 1:50pm Th 8:00am - 8:50am	Seats (Total: 33) PHY 1412 PHY 0405	Discussion
0106	Hailu Gebremariam MWF 1:00pm - 1:50pm M 11:00am - 11:50am	Seats (Total: 33) PHY 1412 PHY 1204	Discussion
0201	Matthew Severson MWF 12:00pm - 12:50pm M 9:00am - 9:50am	Seats (Total: 35) PHY 1412 PHY 1402	Discussion
0202	Matthew Severson MWF 12:00pm - 12:50pm W 9:00am - 9:50am	Seats (Total: 35) PHY 1412 PHY 1402	Discussion
0203	Matthew Severson MWF 12:00pm - 12:50pm M 10:00am - 10:50am	Seats (Total: 35) PHY 1412 CHM 0119	Discussion
0204	Matthew Severson MWF 12:00pm - 12:50pm M 11:00am - 11:50am	Seats (Total: 35) PHY 1412 MTH 0303	Discussion
0205	Matthew Severson MWF 12:00pm - 12:50pm W 11:00am - 11:50am	Seats (Total: 35) PHY 1412 PHY 1204	Discussion
0206	Matthew Severson MWF 12:00pm - 12:50pm W 10:00am - 10:50am	Seats (Total: 35) PHY 1412 PHY 0405	Discussion
0207	Matthew Severson MWF 12:00pm - 12:50pm M 10:00am - 10:50am	Seats (Total: 35) PHY 1412 PHY 1219	Discussion
0208	Matthew Severson MWF 12:00pm - 12:50pm Tu 8:00am - 8:50am	Seats (Total: 35) PHY 1412 PHY 1204	Discussion

0401	Howard Milchberg MW 5:00pm - 6:15pm M 6:30pm - 7:20pm	Seats (Total: 34) PHY 1410 PHY 1204	Discussion
0402	Howard Milchberg MW 5:00pm - 6:15pm W 6:30pm - 7:20pm	Seats (Total: 33) PHY 1410 PHY 1204	Discussion

PHYS271 **General Physics: Electrodynamics, Light, Relativity and Modern Physics (Laboratory)**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS261. Corequisite: PHYS270.

Lab includes experiments on ac circuits, magnetism, light and modern physics. PHYS270 and PHYS271 (lab) must be taken in the same semester.

Students must pay a $50.00 lab materials fee.

0101	Matthew Severson M 9:00am - 11:50am	Seats (Total: 36) PHY 3213	Lab
0102	Matthew Severson W 9:00am - 11:50am	Seats (Total: 36) PHY 3213	Lab
0103	Matthew Severson M 3:00pm - 5:50pm	Seats (Total: 36) PHY 3213	Lab
0104	Matthew Severson Tu 8:00am - 10:50am	Seats (Total: 36) PHY 3213	Lab
0105	Matthew Severson M 6:00pm - 8:50pm	Seats (Total: 36) PHY 3213	Lab
0106	Matthew Severson Tu 11:00am - 1:50pm	Seats (Total: 36) PHY 3213	Lab
0107	Matthew Severson Tu 4:00pm - 6:50pm	Seats (Total: 36) PHY 3213	Lab
0108	Matthew Severson W 5:00pm - 7:50pm	Seats (Total: 36) PHY 3213	Lab

0109	Matthew Severson Th 1:00pm - 3:50pm	Seats (Total: 36) PHY 3213	Lab
0110	Matthew Severson W 2:00pm - 4:50pm	Seats (Total: 36) PHY 3213	Lab
0111	Matthew Severson Th 9:00am - 11:50am	Seats (Total: 36) PHY 3213	Lab
0112	Matthew Severson Th 4:00pm - 6:50pm	Seats (Total: 36) PHY 3213	Lab
0113	Matthew Severson Th 7:00pm - 9:50pm	Seats (Total: 36) PHY 3213	Lab
0114	Matthew Severson Tu 7:00pm - 9:50pm	Seats (Total: 36) PHY 3213	Lab

PHYS271M **General Physics: Electrodynamics, Light, Relativity and Modern Physics (Laboratory)**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS261. Corequisite: PHYS270.

Lab includes experiments on ac circuits, magnetism, light and modern physics. PHYS270 and PHYS271 (lab) must be taken in the same semester.

0101	Instructor: TBA Contact instructor or department for details. *Restricted to students transferring a lab grade from a previous semester.*	Seats (Total: 10)

PHYS272 **Introductory Physics: Fields**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNL (if taken with PHYS275)

Prerequisite: PHYS161 or PHYS171; and MATH141; and must have completed or be concurrently enrolled in MATH241. Credit only granted for: PHYS142, (PHYS260 and PHYS261) or PHYS272.. Additional information: CORE Distributive Studies Physical Sciences Laboratory Course only when taken concurrently with PHYS275.

Second semester of a calculus based general physics course. Universal gravitation, electric and magnetic fields and potentials, simple circuits, Maxwell's equations in integral form. Continues the application of mathematics to conceptual models, now with more abstract components.

Also offered as PHYS272H. Credit granted for PHYS272 or PHYS272H.

0101	Kaustubh Agashe TuTh 12:30pm - 1:45pm W 10:00am - 10:50am	Seats (Total: 60) PHY 1201 ESJ 0215

PHYS272H **Introductory Physics: Fields**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSNL (if taken with PHYS275)

Prerequisite: PHYS161 or PHYS171; and MATH141; and must have completed or be concurrently enrolled in MATH241. Credit only granted for: PHYS142, (PHYS260 and PHYS261) or PHYS272.. Additional information: CORE Distributive Studies Physical Sciences Laboratory Course only when taken concurrently with PHYS275.

Second semester of a calculus based general physics course. Universal gravitation, electric and magnetic fields and potentials, simple circuits, Maxwell's equations in integral form. Continues the application of mathematics to conceptual models, now with more abstract components.

For general honors students only. Also offered as PHYS272. Credit granted for PHYS272 or PHYS272H.

0101	Kaustubh Agashe TuTh 12:30pm - 1:45pm W 10:00am - 10:50am	Seats (Total: 60) PHY 1201 ESJ 0215

PHYS273 **Introductory Physics: Waves**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH241 and PHYS272. Corequisite: PHYS274. Credit only granted for: (PHYS270 and PHYS271) or PHYS273.

Oscillations and AC circuits using complex variables, Fourier series an integrals, waves on strings, sound; electromagnetic waves from Maxwell's equations in differential form; physical optics.

Also offered as PHYS273H. Credit granted for PHYS273 or PHYS273H.

0101	Christopher Lobb TuTh 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 90) PHY 1410 ESJ 2208

PHYS273H **Introductory Physics: Waves**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH241 and PHYS272. Corequisite: PHYS274. Credit only granted for: (PHYS270 and PHYS271) or PHYS273.

Oscillations and AC circuits using complex variables, Fourier series an integrals, waves on strings, sound; electromagnetic waves from Maxwell's equations in differential form; physical optics.

For general honors students only. Also offered as PHYS273. Credit granted for PHYS273 or PHYS273H.

0101	Christopher Lobb TuTh 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 90) PHY 1410 ESJ 2208

PHYS274 **Mathematical Methods for Physics I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH241 and PHYS272.

A first course in mathematical methods for physics. Topics include linear algebra, curvilinear coordinates and vector analysis.

0101	Bei Lok Hu MWF 2:00pm - 2:50pm	Seats (Total: 52) PHY 1201

PHYS275 **Experimental Physics I: Mechanics and Heat**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS161 or PHYS171; and PHYS174. Additional information: CORE Physical Science Lab (PL) Course only when taken concurrently with PHYS272.

Methods and rationale of experimental physics. Intended for physics majors and science and engineering students who desire a more rigorous approach. Experiments chosen from the areas of mechanics (from PHYS171), gas laws, and heats. Theory and applications of error analysis.

0101	Frederick Wellstood W 2:00pm - 5:50pm	Seats (Total: 12) PHY 3104	Lab
0201	Frederick Wellstood M 2:00pm - 5:50pm	Seats (Total: 12) PHY 3104	Lab
0301	Abolhassan Jawahery Tu 2:00pm - 5:50pm	Seats (Total: 12) PHY 3104	Lab
0401	Abolhassan Jawahery Th 2:00pm - 5:50pm	Seats (Total: 12) PHY 3104	Lab
0601	Anwar Bhatti MW 11:00am - 12:50pm	Seats (Total: 12) PHY 3104	

PHYS276 **Experimental Physics II: Electricity and Magnetism**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS272 and PHYS275.

Second course in the three semester introductory sequence. Methods and rationale of experimental physics. Experiments chosen from the fields of electricity and magnetism including electrostatics, magnetostatics, magnetic induction, AC circuits.

0101	Min Ouyang M 1:00pm - 4:50pm	Seats (Total: 12) PHY 3120	Lab
0201	Min Ouyang Tu 1:00pm - 4:50pm	Seats (Total: 12) PHY 3120	Lab
0301	Ki-Yong Kim Th 2:00pm - 5:50pm	Seats (Total: 12) PHY 3120	Lab
0401	Ki-Yong Kim W 2:00pm - 5:50pm	Seats (Total: 12) PHY 3120	Lab

PHYS299 **Special Problems in Physics**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Research or special study to complement courses taken elsewhere which are not fully equivalent to those in departmental requirements. Credit according to work done.

Contact department for information to register for this course.

PHYS332 **Physics for Life Sciences II**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS331; or PHYS131; or students who have taken courses with comparable content may contact the department. Credit only granted for: PHYS122, PHYS132, or PHYS332.

The second part of a two-semester course in general physics specifically oriented towards applications relevant for students in biology and pre-medical programs. The course covers basic statistical physics, electricity and magnetism, and optics done in authentic biological contexts.

SG91	Aaron Rappaport	Seats (Total: 40)	
	TuTh 9:30am - 10:45am	BLD3 2131	
	F 2:00pm - 4:50pm	BLD2 4012	Lab
	F 1:00pm - 1:50pm	BLD1 217	Discussion

Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission. Students must pay a $50.00 lab materials fee.

PHYS371 **Modern Physics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS273 and PHYS274. Corequisite: PHYS373. Credit only granted for: PHYS371 or PHYS420. Additional information: This course is intended primarily for physics and astronomy majors.

Introduces students to special relativity, thermodynamics and quantum mechanics at an intermediate level.

0101	Manuel Franco Sevilla	Seats (Total: 50)
	TuTh 9:30am - 10:45am	PHY 1204

PHYS373 **Mathematical Methods for Physics II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS273 and PHYS274.

A second course in mathematical methods for physics. Topics include introduction to ordinary differential equations, partial differential equations, and complex analysis.

0101	Adil Hassam TuTh 2:00pm - 3:15pm	Seats (Total: 50) PHY 1204	

PHYS375 **Experimental Physics III: Electromagnetic Waves, Optics and Modern Physics**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Prerequisite: PHYS276 and PHYS273.

Third course in the three-semester introductory sequence. Methods and rationale of experimental physics. Experiments chosen from the areas of electromagnetic waves, optics and modern physics.

0101	Sarah Eno, Anton Peshkov, Arpita Upadhyaya M 2:00pm - 2:50pm M 3:00pm - 5:50pm	Seats (Total: 10) PHY 1402 PHY 3203	 Lab
0201	Sarah Eno, Anton Peshkov, Arpita Upadhyaya M 2:00pm - 2:50pm Tu 3:00pm - 5:50pm	Seats (Total: 10) PHY 1402 PHY 3203	 Lab
0301	Anton Peshkov, Arpita Upadhyaya, Sarah Eno M 2:00pm - 2:50pm W 3:00pm - 5:50pm	Seats (Total: 10) PHY 1402 PHY 3203	 Lab
0401	Sarah Eno, Arpita Upadhyaya, Anton Peshkov M 2:00pm - 2:50pm Th 3:00pm - 5:50pm	Seats (Total: 10) PHY 1402 PHY 3203	 Lab

PHYS386 **Experiential Learning**

(Perm req)

Credits: 3-6 | Grading Method: Regular, Pass-Fail

Contact department for information to register for this course.

PHYS389 **Undergraduate Thesis Research**

(Perm req)

Credits: 1-6

Grading Method: Regular, Pass-Fail, Audit

Independent directed research and study on a topic selected by the student in consultation with his or her advisor. Final written thesis and oral defense will be expected.

Contact department for information to register for this course.

PHYS398 **Independent Studies Seminar**

(Perm req)

Credits: 1-16

Grading Method: Regular, Pass-Fail, Audit

Credit according to work done. Enrollment is limited to students admitted to the independent studies program in physics.

Contact department for information to register for this course.

PHYS398T **Independent Studies Seminar; Seminar in Interdisciplinary STEM Education: Teaching Physics for Biologists**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Credit according to work done. Enrollment is limited to students admitted to the independent studies program in physics.

Contact department for information to register for this course.

PHYS399 **Special Problems in Physics**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Selected advanced experiments. (Will be given with sufficient demand.)

Contact department for information to register for this course.

PHYS399C **Special Problems in Physics; Physics STEM Seminar**

(Perm req)

Credits: 1-2

Grading Method: Regular, Pass-Fail, Audit

Selected advanced experiments. (Will be given with sufficient demand.)

0101	Donna Hammer, Thomas Gleason	Seats (Total: 5)
	TBA	PHY 3150

PHYS399D **Special Problems in Physics; Physics STEM Seminar: Design Thinking**

(Perm req)

Credits: 1

Grading Method: Regular

Selected advanced experiments. (Will be given with sufficient demand.)

0101	Donna Hammer, Thomas Gleason	Seats (Total: 12)
	Meets February 12, 2019 - May 14, 2019	
	M 1:00pm - 1:50pm	PHY 1309A
	Contact instructor or department for details.	

PHYS399E **Special Problems in Physics; Physics STEM Seminar III**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Selected advanced experiments. (Will be given with sufficient demand.)

0101	Donna Hammer, Thomas Gleason	Seats (Total: 5)
	Contact instructor or department for details.	

PHYS399J **Special Problems in Physics; Physics STEM SEminar V**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Selected advanced experiments. (Will be given with sufficient demand.)

Contact department for information to register for this course.

PHYS399W **Special Problems in Physics; S-STEM Seminar - Writing Journal Articles**

(Perm req)

Credits: 1-2 Grading Method: Regular

Selected advanced experiments. (Will be given with sufficient demand.)

0101	Donna Hammer, Thomas Gleason	Seats (Total: 10)
	F 2:00pm - 3:15pm	PHY 1309

PHYS401 **Quantum Physics I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS371 and PHYS373. Formerly: PHYS421.

Introduces some quantum phenomena leading to wave-particle duality. Schroedinger theory for bound states and scattering in one dimension. One-particle Schroedinger equation and the hydrogen atom.

0101	Steven Anlage	Seats (Total: 60)	
	MWF 11:00am - 11:50am	PHY 1201	
	M 10:00am - 10:50am	PHY 1201	

PHYS402 **Quantum Physics II**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS401.

Quantum states as vectors; spin and spectroscopy, multiparticle systems the periodic table, perturbation theory, band structure, etc.

0101	Alberto Belloni	Seats (Total: 60)	
	MWF 9:00am - 9:50am	PHY 1201	
	W 10:00am - 10:50am	PHY 1201	

PHYS404 **Introduction to Statistical Thermodynamics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS371 or PHYS420.

Introduction to basic concepts in thermodynamics and statistical mechanics.

0101	Paulo Bedaque	Seats (Total: 70)	
	TuTh 12:30pm - 1:45pm	EGR 0108	

PHYS405 **Advanced Experiments**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS375. Restriction: Must be in a major within CMNS-Physics department.

Advanced laboratory techniques. Selected experiments from many fields o modern physics. Emphasis on self-study of the phenomena, data analysis, and presentation in report form.

0101	Shabnam Jabeen, Vladimir Manucharyan	Seats (Total: 13)	
	W 12:00pm - 12:50pm	PHY 1204	Lab
	TBA	PHY 3112	Lab

0102	Vladimir Manucharyan, Shabnam Jabeen	Seats (Total: 13)	
	W 12:00pm - 12:50pm	PHY 1402	Lab
	TBA	PHY 3112	Lab

PHYS407 **Undergraduate Experimental Research**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: PHYS499 and PHYS375; and permission of CMNS-Physics department. Restriction: Must be in a major within CMNS-Physics department; and senior standing.

Students develop and complete an independent, experimental research project with a professor in the Physics Department. The project should be a continuation of work done in PHYS499A. To obtain permission, students must submit a proposal describing the experimental work to be completed and this proposal must be approved by their faculty mentor, the associate chair for undergraduate education and the chair of the laboratory committee. Students must maintain a lab notebook, give an oral presentation and complete a written report on their research that includes data and error analysis.

0101	Kara Hoffman	Seats (Total: 10)
	Contact instructor or department for details.	

PHYS410 **Classical Mechanics**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS373.

Theoretical foundations of mechanics with extensive application of the methods. Various mathematical tools of theoretical physics.

0101	Carter Hall	Seats (Total: 44)	
	TuTh 11:00am - 12:15pm	PHY 0405	
	F 10:00am - 10:50am	PHY 0405	

PHYS411 **Intermediate Electricity and Magnetism**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS373.

Foundations of electromagnetic theory, with extensive applications of the methods. Thorough treatment of wave properties of solutions of Maxwell's equations.

0101	Anson Hook	Seats (Total: 63)
	TuTh 9:30am - 10:45am	PHY 1201
	F 10:00am - 10:50am	PHY 1201

PHYS420 **Principles of Modern Physics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH246. And PHYS271 and PHYS270; or PHYS273. Credit only granted for: PHYS371 or PHYS420.

A survey of atomic and nuclear phenomena and the main trends in modern physics. Appropriate for students in engineering and other physical sciences.

0101	Kara Hoffman	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	PHY 0405

PHYS431 **Properties of Matter**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS271, PHYS270, and MATH241; and (PHYS401 or PHYS420). Also offered as: ENMA460. Credit only granted for: ENMA460 or PHYS431.

Introduction to solid state physics. Electromagnetic, thermal, and elastic properties of metals, semiconductors, insulators and superconductors.

0101	Jason Hattrick-simpers	Seats (Total: 15)
	MW 3:30pm - 4:45pm	PHY 1402

PHYS441 **Topics in Nuclear and Particle Physics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS401 or PHYS402. Corequisite: PHYS402.

A survey of concepts in particle and nuclear physics, with a topical emphasis on the impact of the Weak Interaction and the discovery of Parity Violation.

0101	Thomas Cohen	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ATL 2352

PHYS457 **Introduction to Quantum Computing**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (MATH240, PHYS274); and 1 course with a minimum grade of C- from (CMSC351, PHYS373). Restriction: Permission of CMNS-Physics department; or permission of CMNS-Computer Science department. Also offered as: CMSC457. Credit only granted for: PHYS457 or CMSC457. Additional information: No previous background in quantum mechanics is required.

An introduction to the concept of a quantum computer, including algorithms that outperform classical computation and methods for performing quantum computation reliably in the presence of noise. As this is a multidisciplinary subject, the course will cover basic concepts in theoretical computer science and physics in addition to introducing core quantum computing topics.

0101	Andrew Childs	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	CSI 1122

PHYS474 **Computational Physics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PHYS404; and PHYS373; and (PHYS165, CMSC106, or CMSC131). Or permission of instructor.

This course provides an overview of some of the most widely used methods of computational physics, including numerical integration (elementary algorithms and Monte Carlo techniques), numerical solutions of differential equations (classical equations of motion, time independent and time dependent Schrodinger equations), molecular dynamics simulations (classical many-body systems), and Monte Carlo simulations (classical models of magnetism). In addition to giving the students a basic working knowledge of these particular techniques, the goal is to make them proficient in scientific computing and programming in general, so that they will be prepared to tackle also other computational problem that they may encounter in the future.

0101	Ian Appelbaum	Seats (Total: 36)
	MW 3:00pm - 4:15pm	AJC 2134

PHYS499A **Special Problems in Physics**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Research or special study. Credit according to work done.

Contact department for information to register for this course.

PHYS499B **Special Problems in Physics**

(Perm req)

Credits: 1-16

Grading Method: Regular, Pass-Fail, Audit

Research or special study. Credit according to work done.

Contact department for information to register for this course.

PHYS499P **Special Problems in Physics; Particle Astrophysics**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Research or special study. Credit according to work done.

Prerequisite: PHYS401. Prerequisite/Co-requisite: PHYS401, PHYS411, or permission of instructor. Particle Astrophysics is an emerging field using particle physics techniques to study high-energy phenomena in the Universe. In this course we will give an overview of the field with emphasis on current experiments. The topics will include cosmic rays, neutrino oscillations, neutrino astronomy, gamma-ray astronomy, gamma-ray bursts, dark matter, and dark energy. The course will be taught by scientists working on many of the major experiments in the field including IceCube, HAWC, Fermi, and LIGO.

0101	Gregory Sullivan, Jordan Goodman	Seats (Total: 35)	
	TuTh 2:00pm - 3:15pm	PHY 1219	

PHYS499T **Special Problems in Physics; Accelerator Physics - Building the Maryland 5 MeV Cyclotron**

(Perm req)

Credits: 3

Grading Method: Regular

Research or special study. Credit according to work done.

Prerequisite: ENEE380. Corequisite: ENEE381 or PHYS411; or permission of instructor. Restriction: Permission of ECE department. Cyclotrons are versatile accelerators whose use, because of an unsurpassed economic footprint, continues to expand in basic research, industry, medicine, and education. They also capture most of fundamentalphysics and technology of the biggest particle accelerators, such as CERN's LHC. This course provides students with a hands-on introduction to fundamental beam physics as well as the technology of cyclotrons, their design, commissioning, and operation. Students of this course will be designing and building a cyclotron.

0101	Timothy Koeth, Brian Beaudoin	Seats (Total: 12)	
	TuTh 9:30am - 10:45am	EGR 1102	
	F 9:00am - 12:00pm	EGR 0312	Lab

PHYS499V **Special Problems in Physics; Colloquium for Undergraduate Physics Majors**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Research or special study. Credit according to work done.

0101	Instructor: TBA Th 4:00pm - 6:15pm	Seats (Total: 60) PHY 1201

PHYS499X **Special Problems in Physics; Making Physics Experiments**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Research or special study. Credit according to work done.

Pre-requisite: PHYS276 or permission of instructor

0101	Daniel Lathrop MW 1:00pm - 1:50pm F 1:00pm - 2:50pm	Seats (Total: 10) PHY 1309 Location: TBA	 Lab

PHYS603 **Methods of Statistical Physics**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: PHYS602 or PHYS603.

Foundations and applications of thermodynamics and statistical mechanics.

Advanced special students require department authorization. Also offered as CHPH718F.

0101	Brian Swingle TuTh 9:30am - 10:45am	Seats (Total: 49) PHY 1402

PHYS606 **Electrodynamics**

Credits: 4 Grading Method: Regular, Audit

Prerequisite: PHYS604; or students who have taken courses with comparable content may contact the department.

Classical electromagnetic theory, electro- and magnetostatics, Maxwell equations, waves and radiation, special relativity.

0101	James Drake TuTh 11:00am - 12:40pm	Seats (Total: 49) PHY 1402

PHYS623 **Introduction to Quantum Mechanics II**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have an outstanding undergraduate background in physics.

First and second semesters. A study of the Schroedinger equation, matrix formulations of quantum mechanics, approximation methods, scattering theory etc., and applications to solid state, atomic, and nuclear physics. Continuation of PHYS 622.

Advanced special students require department authorization.

0101	Victor Yakovenko	Seats (Total: 49)
	MW 2:00pm - 3:15pm	CHE 2108

PHYS625 **Non-relativistic Quantum Mechanics**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PHYS623.

Non-relativistic second quantization, single particle Green's function, perturbation theory, linked cluster expansion, Feynman and Goldstone diagrams; applications to imperfect Fermi gases; superconductivity.

0101	Victor Galitski	Seats (Total: 30)
	MW 12:30pm - 1:45pm	PHY 1219

PHYS709 **Seminar in General Physics; Statistical Physics**

Credits: 1 Grading Method: Regular, Audit

Also offered as CHPH709B. Credit granted for CHPH709B or PHYS709.

0101	Zeina Mneimneh	Seats (Total: 30)
	Tu 1:15pm - 2:30pm	IPT 1116

PHYS720 **Quantum Technology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: A good grounding in electromagnetism and quantum mechanics is necessary; familiarity with density matrices and master equations will be helpful.

Physical principles behind emerging quantum technologies, from quantum-limited amplifiers to atomic simulators. Examination of current and emerging platforms for quantum technologies, including neutral atom, ion trap, superconducting circuit, photonic, and spin-based approaches. Focus on hurdles for implementing quantum devices for new applications.

Also offered as ENEE789M. Credit only granted for PHYS720, PHYS798M, or ENEE789M.

0101	Mohammad Hafezi, Jacob Taylor MW 3:00pm - 4:15pm	Seats (Total: 25) ATL 2330

PHYS728 **Seminar in Atomic and Molecular Physics**

Credits: 1 Grading Method: Regular, Audit

0101	Mohammad Hafezi M 11:00am - 12:15pm	Seats (Total: 30) ATL 2400

PHYS731 **Solid State Physics: Survey**

Credits: 3 Grading Method: Regular, Audit

A variety of topics such as crystal structure, mechanical, thermal, electrical, and magnetic properties of solids, band structure, the Fermi surface, and superconductivity will be treated. Although the emphasis will be on the phenomena, the methods of quantum mechanics are freely employed in this description.

0101	Jay Sau TuTh 11:00am - 12:15pm	Seats (Total: 30) PHY 1204

PHYS738 **Seminar in Experimental Solid State Physics; Quantum Mechanical Many-Body Problems**

Credits: 1 Grading Method: Regular, Audit

Advanced special students require department authorization.

0101	Johnpierre Paglione Th 2:00pm - 3:30pm	Seats (Total: 30) PHY 1201

PHYS739 **Seminar in Theoretical Solid State Physics; Quantum Mechanical Many-Body Problems**

Credits: 1 Grading Method: Regular, Audit

Advanced special students require department authorization.

0101	Sankar Das Sarma Tu 11:00am - 12:30pm	Seats (Total: 30) PHY 2205

PHYS748 **Seminar in Experimental Nuclear Physics; Seminar in Nuclear Physics**

Credits: 1 Grading Method: Regular, Audit

0101	Carter Hall W 11:30am - 1:00pm	Seats (Total: 10) PHY 2202

PHYS749 **Seminar in Theoretical Nuclear Physics**

Credits: 1 Grading Method: Regular, Audit

0101	Paulo Bedaque Th 2:30pm - 4:00pm	Seats (Total: 30) PSC 3150

PHYS758E **Seminar in Elementary Particles and Quantum Field Theory; Experimental Results Including Cosmic Ray Physics**

Credits: 1 Grading Method: Regular, Audit

0101	Abolhassan Jawahery W 4:00pm - 5:30pm	Seats (Total: 25) PHY 0405

PHYS759 **Seminar in Elementary Particles and Quantum Field Theory**

Credits: 1 Grading Method: Regular, Audit

Advanced special students require department authorization.

0101	Kaustubh Agashe M 3:00pm - 4:30pm	Seats (Total: 27) PSC 3150

PHYS769 **Seminar in Plasma Physics; Plasma Physics Research**

Credits: 1 Grading Method: Regular, Audit

Advanced special students require department authorization.

0101	Adil Hassam	Seats (Total: 20)
	W 3:30pm - 5:00pm	ERF 1207

PHYS778 **Seminar in Space and Cosmic Ray Physics**

Credits: 1 Grading Method: Regular, Audit

Advanced special students require department authorization.

0101	Eun-Suk Seo	Seats (Total: 15)
	M 4:30pm - 5:45pm	ATL 2400

PHYS798 **Special Problems in Advanced Physics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Projects or special study in advanced physics.

Contact department for information to register for this course.

PHYS798B **Special Problems in Advanced Physics; Physics Colloquium**

Credits: 1 Grading Method: Regular, Audit

Projects or special study in advanced physics.

0101	Thomas Cohen	Seats (Total: 100)
	Tu 4:00pm - 5:30pm	PHY 1412

PHYS798D **Special Problems in Advanced Physics; Applied Dynamics Seminar**

Credits: 1 Grading Method: Regular, Audit

Projects or special study in advanced physics.

Also offered as ENEE698D. Credit granted ENEE698D or PHYS798D.

0101	Edward Ott, Daniel Lathrop	Seats (Total: 20)
	Th 12:30pm - 1:30pm	ERF 1207

PHYS798J **Special Problems in Advanced Physics; Science and Technology Police**

Credits: 3 Grading Method: Regular, Audit

Projects or special study in advanced physics.

Also offered as PLCY689L. Credit only granted for PLCY689L or PHYS798J.

0101	Rosina Bierbaum, Sylvester Gates Tu 7:00pm - 9:30pm	Seats (Total: 25) VMH 1203

PHYS798L **Special Problems in Advanced Physics; Biophysics**

Credits: 1 Grading Method: Regular, Audit

Projects or special study in advanced physics.

Also offered as CHPH709L and BIPH698L. Credit granted for CHPH709L, BIPH698L or PHYS798L.

0101	Arpita Upadhyaya M 4:00pm - 5:30pm	Seats (Total: 20) CHM 0112

PHYS798N **Special Problems in Advanced Physics; Data Practicum at the Intersection of the Physical, computer, and Life Sciences**

Credits: 3 Grading Method: Regular, Audit

Projects or special study in advanced physics.

0101	Michelle Girvan, Daniel Serrano MW 11:00am - 12:15pm Contact instructor or department for details.	Seats (Total: 15) AJC 2134

PHYS798U **Special Problems in Advanced Physics; Interdisciplinary Network Science Research in Progress**

Credits: 1 Grading Method: Regular, Audit

Projects or special study in advanced physics.

0101	Michelle Girvan, Daniel Serrano W 1:00pm - 1:50pm	Seats (Total: 25) AJC 2134

PHYS799 **Master's Thesis Research**

(Perm req) Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

PHYS799B **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

0101	Thomas Cohen	Seats (Total: 10)
	Contact instructor or department for details.	

PHYS838C **Special Topics in Experimental Solid State Physics; Center for Nanophysics and Advanced Materials Seminar**

Credits: 2 Grading Method: Regular, Audit

Credit according to work done.

0101	Richard Greene, Johnpierre Paglione	Seats (Total: 30)
	M 4:00pm - 6:00pm	PHY 1201

PHYS839A **Special Topics in Theoretical Solid State Physics**

Credits: 1-4 Grading Method: Regular, Audit

Credit according to work done.

0101	Sankar Das Sarma	Seats (Total: 10)
	Contact instructor or department for details.	

PHYS851 **Advanced Quantum Field Theory**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PHYS624.

Renormalization, unitarity, gauge theory, S-matrix construction.

0101	Zackaria Chacko	Seats (Total: 25)
	TuTh 11:00am - 12:20pm	PHY 1219

PHYS879U **Special Topics in General Relativity; Introduction to Holographic Duality**

Credits: 3 Grading Method: Regular, Audit

Credit according to work done.

0101	Theodore Jacobson M 11:00am - 12:15pm W 11:00am - 12:15pm	Seats (Total: 30) PSC 3150 PHY 1219

PHYS898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

PHYS899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

PLCY Public Policy Spring 2019

PLCY100 **Foundations of Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS

A survey course, focusing on public policy institutions and analytical issues as well as on overview of key public policy problems. Students will be introduced to public policy as a discipline, with a brief overview of the actors and institutions involved in the process, and familiarize themselves with the kinds of problems typically requiring public action. The course will examine these problems from a multijurisdictional and multisectoral perspective. Specific policy areas examined include education policy, health policy, economic and budgetary policy, criminal justice policy, environmental policy, and national and homeland security policy. The course should permit students to have broad foundational exposure to the field that will give them a solid base for more advanced courses.

0101	Jennifer Littlefield TuTh 2:00pm - 3:15pm W 10:00am - 10:50am	Seats (Total: 25) TWS 0310 TWS 1313	 Discussion
0102	Jennifer Littlefield TuTh 2:00pm - 3:15pm W 11:00am - 11:50am	Seats (Total: 25) TWS 0310 TWS 0205	 Discussion

0103	Jennifer Littlefield TuTh 2:00pm - 3:15pm F 1:00pm - 1:50pm	Seats (Total: 25) TWS 0310 SQH 1101	Discussion
0104	Jennifer Littlefield TuTh 2:00pm - 3:15pm F 12:00pm - 12:50pm	Seats (Total: 25) TWS 0310 SQH 1101	Discussion

PLCY101 **Great Thinkers on Public Policy**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Additional information: Emphasis will be on the interdisciplinary foundations of public policy, through examining core disciplinary contributions from economics, political science, management, philosophy, and other relevant disciplines.

Great ideas in public policy, such as equality, efficiency, sovereignty, liberty, bureaucracy, democracy and security are explored through the lens of great thinkers. An introduction to the intellectual foundations of public policy, from ancient theories on collective public action through the more contemporary development of public policy as a discipline. This may start as early as the ancient Greek philosophers and their views on public action through contemporary classics of public policy. At the conclusion of the course, students will have read classic works in the field and will master the key themes that have dominated the intellectual debates about public policy over its history. Emphasis will be on the interdisciplinary foundations of public policy, through examining core disciplinary contributions from economics, political science, management, philosophy, and other relevant disciplines.

0101	Nathan Jessen MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) SQH 1120 SYM 0209	Discussion
0102	Nathan Jessen MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 20) SQH 1120 BPS 0283	Discussion
0103	Nathan Jessen MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 20) SQH 1120 HBK 0125	Discussion
0201	Gregory Ramsay MW 11:00am - 11:50am F 10:00am - 10:50am *For students with an interest in Global dimensions of Public Policy.*	Seats (Total: 22) TYD 1101 WDS 1114	Discussion

0202	Gregory Ramsay MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 24) TYD 1101 ASY 3219	Discussion
	For students with an interest in Global dimensions of Public Policy.		
0203	Gregory Ramsay MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 20) TYD 1101 KEY 0124	Discussion
	For students with an interest in Global dimensions of Public Policy.		
0301	Mathew Feehan TuTh 7:00pm - 7:50pm F 10:00am - 10:50am	Seats (Total: 20) TWS 1100 JMZ 2125	Discussion
0302	Mathew Feehan TuTh 7:00pm - 7:50pm F 11:00am - 11:50am	Seats (Total: 20) TWS 1100 EDU 3233	Discussion
0303	Mathew Feehan TuTh 7:00pm - 7:50pm F 12:00pm - 12:50pm	Seats (Total: 20) TWS 1100 JMZ 1215	Discussion

PLCY201 **Public Leaders and Active Citizens**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, DSSP, SCIS

Credit only granted for: PLCY201 or PUAF201. Formerly: PUAF201.

Aims to inspire, teach and engage students in the theory and practice of public leadership from the local to the national to the global level. Students will learn and apply diverse approaches to leadership in a multicultural society while developing an understanding of key frameworks and practices necessary to foster collective action across private, public, and nonprofit sectors. This course will allow students to become informed citizens able to reason critically and persuasively about public matters Students will also explore and assess their own personal values, beliefs, and purpose as they develop their leadership potential.

0101	Nancy Lineman Tu 5:00pm - 7:30pm	Seats (Total: 140) ESJ 2204	

PLCY213 **Foundations of Nonprofit Leadership and Social Innovation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Through discussions of contemporary trends, challenges and issues, this course provides an introduction to the nonprofit and NGO sectors, social innovation, and the leadership and management skills required to achieve social impact. The course will explore the history, theories, and roles of philanthropy, the nonprofit sector, and social innovation in societies and cultures. Students will be able to demonstrate an understanding of the process and principles of social entrepreneurship and social innovation. Additionally, the course will introduce students to topics in leadership, social innovation, resource development, community mobilization through networks, the role of policy-making in creating change, project management, and overall strategies for achieving social impact. The course will include mini hands-on learning experiences that allow them to apply key learning outcomes.

0101	Claire Dunning TuTh 9:30am - 10:45am	Seats (Total: 40) TLF 1126
0102	Alexander Counts M 3:30pm - 6:00pm	Seats (Total: 40) TLF 1126

PLCY215 Innovation and Social Change: Creating Change for Good

Credits: 3 Grading Method: Regular General Education: DSSP

Credit only granted for: PLCY215 or PUAF215. Formerly: PUAF215.

A team-based, highly interactive and dynamic course that provides an opportunity for students to generate solutions to a wide range of problems facing many communities today. Students in the iGIVE Program will deepen their understanding of entrepreneurship and innovation practices by creating and implementing projects or ventures that address an issue of their choosing while learning topics such as communications, project management, teamwork, leadership, fundraising, project sustainability and next steps in social change.

Restricted to member of the iGive Living Learning Program.

0101	Patricia Bory TuTh 5:00pm - 6:15pm	Seats (Total: 44) TWS 1310

PLCY301 Sustainability

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as: AGNR301. Credit only granted for: AGNR301, PUAF301, or PLCY301. Formerly: PUAF301.

Designed for students whose academic majors would be enhanced by the complementary study of a widely shared but hard-to-operationalize aspiration: that present choices should preserve or improve future options rather than foreclose or degrade them. How should we understand sustainability? How might we achieve it? How would we know if we had achieved it? And how could sustainability activists of a rising generation lead by example?

0101	Daria Scala	Seats (Total: 130)
	TuTh 12:30pm - 1:45pm	SHM 2102

PLCY302 **Examining Pluralism in Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: PLCY302 or PUAF302. Formerly: PUAF302.

Understanding pluralism and how groups and individuals coexist in society is an essential part of the public policy process. This course will examine the ways in which the diverse experiences of race, gender, ethnicity, class, orientation, identity, and religion impact the understanding of and equitable delivery of public policy. The examination of how identity development shapes our understanding of society and influences the decision-making process is central to students' shaping policy that is truly for the people. This course will equip students with the skills needed to analyze pluralism and draw conclusions about the application of various theories to public policy issues.

0101	Tiffany Ford, Nina Harris	Seats (Total: 90)
	W 4:15pm - 6:45pm	TWS 1100

PLCY303 **Public Economics Raising and Spending the People's Money**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ECON200. Restriction: Must be in a major in PLCY-School of Public Policy.

Applied course in public finance, including introductions to resource mobilization (including taxation), macroeconomic policy, key public expenditure policies, and government budgetary processes and politics. The course will build on the foundations from ECON 202 to address the specific application of public finance principles to solving public problems. The course will focus on the principles of welfare economics (including market failure), economic principles as applied to particular spending programs and tax choices, and issues and institutions involved in the allocation and management of resources both at a national and subnational level. The focus of the course is on these issues from both a domestic and global perspective.

0101	Juan Martinez Guzman	Seats (Total: 45)
	M 2:00pm - 4:30pm	BPS 1236

0102	Juan Martinez Guzman Tu 2:00pm - 4:30pm	Seats (Total: 45) HBK 0115

PLCY306 **Public Policy Analysis in Action**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must have earned a minimum of 60 credits; and must be in a major in PLCY-School of Public Policy.

Utilizes our unique location in the Washington, D.C. region to create a laboratory within which to analyze local, regional, national and international policy problems. Students will be put into teams and assigned to real and timely policy cases. The course will include meetings and field trips with local leaders in the field, ideally connected to the cases. Student will then expand and apply their use of policy analysis and evaluation skills to define those problems, analyze alternative responses, devise appropriate strategies for implementation, and evaluate the success of the proposed policy and implementation. The course will conclude with team presentations to local leaders and faculty. This distinctive course will serve to prepare students for their client- based senior capstone course.

0101	Kathleen Vogel Th 3:30pm - 6:00pm	Seats (Total: 48) HJP 2242

PLCY309 **Internship in Political Institutions: State and Local**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Offers students supervised internship placements in state and local political or public policy organizations.

0101	Jennifer Littlefield Contact instructor or department for details.	Seats (Total: 30)
0201	Susannah Washburn Contact instructor or department for details.	Seats (Total: 15)

PLCY310 **Nonprofit Leadership and Social Innovation in Action**

Credits: 3 Grading Method: Regular

Furthers students understanding of topics in leadership, social innovation, resource development, community mobilization through networks, and the role of policy making in creating change. This course will further students understanding of the creation and leadership of nonprofits, social ventures, governance and boards; strategic planning and partnerships; advocacy and public policy processes; community outreach; working in teams, effective communications, and cross-sector approaches to scaling up social impact.

0101	Patricia Bory	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	TLF 1126

PLCY311 **Women in Leadership**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: PUAF311, PLCY311 or PUAF359W. Formerly: PUAF359W.

Examines the role of women in the leadership process including the participation of women as activists, voters, advocates, public leaders and as agents of change through various avenues including, among others, public service (elected and appointed), the media, community service, political organizations, and the nonprofit sector.

0101	Anne Kaiser	Seats (Total: 35)
	Tu 5:00pm - 7:30pm	TLF 1126

PLCY313 **Advocacy in the American Political System**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: PUAF313, PLCY313 or PUAF359C. Formerly: PUAF359C.

Introduces students to the creation of law through the legislative process with a special focus on the Maryland General Assembly.

0101	Gerard Evans	Seats (Total: 90)
	M 2:00pm - 4:30pm	SQH 1120

PLCY386 **Experiential Learning**

(Perm req)

Credits: 1-6 Grading Method: Regular

Prerequisite: Permission of PLCY-School of Public Policy. Repeatable to 12 credits if content differs. Credit only granted for: PLCY386 or PUAF386. Formerly: PUAF386.

0101	Nina Harris	Seats (Total: 15)
	Contact instructor or department for details.	

PLCY388 **Special Topics in Public Policy**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

0101	Jennifer Littlefield	Seats (Total: 20)
	W 3:00pm - 3:50pm	KEY 0121

PLCY388C **Special Topics in Public Policy; Cybersecurity Policy: Practical Hacking for Policy Makers**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Also offered as INST408V. Credit only granted for PLCY388C or INST408V. Students will explore the key issues facing policy makers attempting to manage the problem of cybersecurity from its technical foundations to domestic and international policy considerations surrounding governance, privacy, risk management, and operational orchestration. It is designed for students with no background in information technology, and will provide the principles to understand the current debates shaping a rapidly evolving security landscape.

0101	Charles Harry	Seats (Total: 50)
	TuTh 3:30pm - 4:45pm	PHY 4221

PLCY388D **Special Topics in Public Policy; Innovation and Social Change: Do Good Now**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP, SCIS

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Introduces students to the concept of social innovation while exploring the many mechanisms for achieving social impact. It is team-based, highly interactive and dynamic, and provides an opportunity for students to generate solutions to a wide range of problems facing many communities today. Deepens the students understanding of entrepreneurship and innovation practices by guiding them through the creation and implementation process as applied to a project idea of their choice.

0101	Toby Egan	Seats (Total: 43)
	TuTh 2:00pm - 3:15pm	TLF 1126

0201	Tricia Homer	Seats (Total: 17)
	W 3:00pm - 5:30pm	SQH 2120

PLCY388F **Special Topics in Public Policy; Contemporary Issues Under the Rule of Law**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

"Fake news" and freedom of the press, money in electoral politics, voter photo ID laws and political gerrymandering, continued racial segregation in public schools, privacy on the street and in school, holding public officials accountable for egregious constitutional violations, and unequal justice for the poor are all thorny issues of public policy thathave found their way into American courts. This courseexamines these and other current issues presented to the courts ina format wherestudents evaluate and opine on the competing legal and policy arguments in class and in papers as if they were the empowered judicial authority.The course also provides a broad overview of the waysAmericancourts function as well as an opportunity to visit with a federal judge,hear the experiences of former jurors, and possibly visit a landlord-tenant courtin action.

0101	David Falk	Seats (Total: 25)
	TuTh 9:30am - 10:45am	WDS 0104

PLCY388I **Special Topics in Public Policy; Child and Family Advocacy Impact**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Advocates for children and families have accomplished a great deal over the years. They ve reduced hunger and extended access to health care. They ve expanded early childhood education and broadened economic supports. But so much more remains to be done to ensure social justice and equity so that all children and families can thrive. The second semesterof Child and Family Advocacy Impact will concentrate on developing advocacyskills, everything from leveraging the legislative process and creating effective messaging strategies to working in coalitions and mobilizing grassroots supporters.

0101	Adele Robinson	Seats (Total: 24)
	TuTh 11:00am - 12:15pm	TLF 1126

PLCY388O **Special Topics in Public Policy; China: China's Philanthropic and Social Sector - Policy and Management Perspectives**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Contact department for information to register for this course.

PLCY388P **Special Topics in Public Policy; U.S. Immigration Policy: A Retrospective & Contemporary Review of Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Students will focus on studying the major eras of U.S Immigration Policy and will dive into understanding the various actors, reforms, policy tools and enforcement methods that have been implemented. The course consists of two modules. Module 1 dives into readings about immigration, immigrant policies, policy actors, and enforcement tools. Module 2 integrates social science methods for collecting and evaluating quantitative data to study the local implementation of immigration enforcement operations by learning the nuts and bolts of data collection, documentation, management, and analysis.

0101	M Apolonia Calderon	Seats (Total: 20)
	M 7:00pm - 9:30pm	TLF 1126

PLCY388T **Special Topics in Public Policy; Undergraduate Teaching Assistant Directed Study**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Contact department for information to register for this course.

PLCY388W **Special Topics in Public Policy; Global Action and Problem Solving**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Today's most pressing problems do not stop at national borders. Meeting these challenges requires a range of state and non-state actors to work together. Students gain familiarity with key actors in the global system and how they approach today's most intractable problems. How do countries, international organizations, multinational corporations, and nongovernmental organizations find ways to cooperate when their interests and capabilities sometimes differ drastically? And,what are the key barriers to cooperation? We will examine a set of global policy issues requiring a transnational response including violent conflict, nuclear non-proliferation, human rights, migration, international trade, climate change, infectious disease, and humanitarian relief.

0101	Catherine Worsnop W 2:00pm - 4:30pm	Seats (Total: 25) BPS 1238

PLCY400 **Senior Capstone**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: PLCY306. Restriction: Permission of PLCY-School of Public Policy; and must have earned a minimum of 90 credits.

Public Policy students will take the skills and knowledge gained through their curriculum and apply them through their senior capstone course. Students will work in teams on problems and issues presented by outside clients, with guidance from faculty facilitators and interaction with the clients. Each team will work with the client to address a particular problem and produce a mutually agreed upon outcome. These hands on projects will advance students' understanding of the analytical, leadership, communication and problem solving skills necessary to address today's policy problems while allowing them to gain professional level experience that could contribute to their success in their post UMD endeavors. The course will conclude with an event that allows all teams to present their findings and outcomes to their client while being evaluated by faculty and public policy professionals.

0101	Juan Martinez Guzman Th 2:00pm - 4:30pm	Seats (Total: 25) HBK 0105

PLCY401 **Contemporary Issues in Public Policy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must have earned a minimum of 90 credits.

An integrative course that allows policy students to explore the complexities of the policy-making process from the perspective of specific policy topics. They will learn about and discuss subject- based issues in a seminar format led by faculty and policy experts. Site visits to federal agencies, guest speakers, and round table sessions ensure that students receive a variety of real-world perspectives on their chosen policy area.

0101	Phillip Swagel MW 11:00am - 12:15pm	Seats (Total: 40) BPS 1236

PLCY610 **Quantitative Aspects of Public Policy**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY610 or PUAF610. Formerly: PUAF610.

Introduces statistical methods needed for evaluating and choosing among policy options. Topics include probability; decision-making under uncertainty; the organization, interpretation, and visual display of complex data; prediction and inferences about causality; hypothesis testing; and linear and multiple regression. Develops analytical skills and the ability to apply theory to complex, real-world problems.

0101	Anthony Sanford	Seats (Total: 30)	
	W 4:15pm - 6:45pm	VMH 1207	
	Tu 7:00pm - 9:30pm	VMH 1207	Discussion

PLCY611 **Quantitative Analysis of Policy Issues**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY611 or PUAF611. Formerly: PUAF611.

Study of a series of problems and the development of quantitative techniques to describe or evaluate the problem. The organization and interpretation of complex data and its use for prediction and inference about casual effects. The definition of objectives, trade-offs among objectives, and allocation of resources to meet objectives. Sensitivity of outcomes to changing conditions.

0101	Seth Weissman	Seats (Total: 20)	
	W 7:00pm - 9:30pm	VMH 1203	
	Tu 7:00pm - 9:30pm	PKT 1221	Discussion

PLCY640 **Microeconomic and Policy Analysis**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY640 or PUAF640. Formerly: PUAF640.

Applies intermediate microeconomic theory to public policy issues: resource allocation by firms and consumers; the response of economic agents to changes in incentives; market allocations in competitive and non-competitive environments; and market failures and government remedies. Uses extended case studies of particular issues in such areas as the environment (acid rain), international trade (tariffs), industry regulation (cable TV), and the provision of public goods (highways).

0101	Yueming Qiu	Seats (Total: 29)	
	Tu 4:15pm - 6:45pm	VMH 1207	
	F 9:15am - 11:45am	VMH 1207	Discussion

PLCY650 **Moral Dimensions of Public Policy**

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY650 or PUAF650. Formerly: PUAF650.

Explores the moral issues involved in public policy questions; the limits and usefulness of decision-making tools; problems of choosing, justifying and using criteria to judge a program's success and suitability; ethichal issues involving the welfare state and income distribution; and possible obligations beyond one's political community and generation.

Contact department for information to register for this course.

PLCY670 **Public Budgeting & Financial Management**

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLYC670 or PUAF670. Formerly: PUAF670.

Covers how governments raise, spend, borrow, and manage public funds. Reviews federal,state, and local budget processes and introduces analytical techniques including basic spreadsheet skills, evaluating alternative revenue sources, revenue and expenditure forecasting, cost allocation, capital budgeting, cost-benefit analysis, discounting and present value, bond analysis, cash management and intergovernmental finance.

Contact department for information to register for this course.

PLCY688C **Topics in Public Policy; Cyberspace: Legal and Policy Implications**

Credits: 3

Grading Method: Regular, Audit

Special topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	Brian David Mussington	Seats (Total: 20)
	Tu 4:15pm - 6:45pm	VMH 2101F

PLCY688E **Topics in Public Policy; Governance: Normative & Political Dimensions**

Credits: 3

Grading Method: Regular, Audit

Special topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	Catherine Worsnop Th 9:15am - 11:45am	Seats (Total: 20) VMH 1203

PLCY688F **Topics in Public Policy; State, Local & Non-Profit Financial Management**

Credits: 3 Grading Method: Regular, Audit

Special topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	Thomas Spreen Tu 4:15pm - 6:45pm	Seats (Total: 30) VMH 1203

PLCY688G **Topics in Public Policy; Governance: Leadership, Management and Accountability**

Credits: 3 Grading Method: Regular, Audit

Special topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	Elizabeth Duke Tu 9:15am - 11:45am	Seats (Total: 20) VMH 1203
0201	Miguel Gonzalez-Marcos M 4:15pm - 6:45pm	Seats (Total: 20) VMH 1107
0301	Miguel Gonzalez-Marcos W 1:30pm - 4:00pm	Seats (Total: 20) VMH 1203

PLCY688I **Topics in Public Policy; Macroeconomics for Public Policy**

Credits: 2 Grading Method: Regular, Audit

Special topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	John Green	Seats (Total: 33)	
	Meets January 29, 2019 - April 11, 2019		
	Tu 1:30pm - 4:00pm	VMH 1203	
	M 9:15am - 11:45am	VMH 1203	Discussion
	Meets first 11 weeks only.		

PLCY688N **Topics in Public Policy; Development Diplomacy and Leadership**

Credits: 3 Grading Method: Regular, Audit

Special topics in Public Policy.

Contact department for information to register for this course.

PLCY688R **Topics in Public Policy; Public Budgeting and Financial Management**

Credits: 2 Grading Method: Regular, Audit

Special topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	Thomas Spreen	Seats (Total: 30)	
	Meets March 4, 2019 - May 14, 2019		
	M 1:30pm - 4:00pm	VMH 1203	
	Meets last 10 weeks only.		

PLCY688T **Topics in Public Policy; Team-Based Policy Lab**

Credits: 3 Grading Method: Regular, Audit

Special topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0201	Sara Kutchesfahani	Seats (Total: 15)	
	W 9:15am - 11:45am	VMH 1107	
	Congressional projects in multiple topic areas.		
0301	Juan Martinez Guzman	Seats (Total: 15)	
	W 9:15am - 11:45am	VMH 1207	
	Projects in management, budget, and social policy.		

0401	Christopher Foreman Th 4:15pm - 6:45pm *Projects in social policy.*	Seats (Total: 15) VMH 1207
0501	Anand Patwardhan Th 4:15pm - 6:45pm *Projects in environmental and energy policy.*	Seats (Total: 15) VMH 1107
0601	Brian David Mussington W 9:15am - 11:45am	Seats (Total: 15) VMH 1203

PLCY688X **Topics in Public Policy; Human Dignity**

Credits: 3 Grading Method: Regular, Audit

Special topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	Chloe Schwenke Tu 7:00pm - 9:30pm	Seats (Total: 20) VMH 2101F

PLCY689E **Public Policy Topics; Program Evaluation and Cost-Benefit Analysis**

Credits: 3 Grading Method: Regular, Audit

Special Topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	Peter Germanis, Douglas Besharov, Douglas Call Th 7:00pm - 10:00pm	Seats (Total: 45) VMH 1212
0201	Douglas Call, Peter Germanis, Douglas Besharov Th 7:00pm - 10:00pm	Seats (Total: 45) VMH 1203
0301	Douglas Call, Peter Germanis, Douglas Besharov Th 7:00pm - 10:00pm	Seats (Total: 25) VMH 1207

PLCY689F **Public Policy Topics; Current Issues in Federal Acquisition**

Credits: 3 Grading Method: Regular, Audit

Special Topics in Public Policy.

Also offered as BUSI758P and ENSE698F. Credit granted for PUAF689F, BUSI758P or ENSE698F.

0101	William Greenwalt	Seats (Total: 20)
	W 7:00pm - 9:30pm	VMH 1101

PLCY689L **Public Policy Topics; Science and Technology Policy**

Credits: 3 Grading Method: Regular, Audit

Special Topics in Public Policy.

Also offered as PHYS798J. Credit only granted for PLCY689L or PHYS798J.

0101	Rosina Bierbaum, Sylvester Gates	Seats (Total: 25)
	Tu 7:00pm - 9:30pm	VMH 1203

PLCY689O **Public Policy Topics; Counterintelligence and National Security**

Credits: 1-3 Grading Method: Regular, Audit

Special Topics in Public Policy.

Contact department for information to register for this course.

PLCY689P **Public Policy Topics; Strategic Philanthropy**

Credits: 3 Grading Method: Regular, Audit

Special Topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	Claire Dunning	Seats (Total: 20)
	M 1:30pm - 4:00pm	VMH 1101

PLCY689X **Public Policy Topics; Performance Management and Leadership**

Credits: 3

Grading Method: Regular, Audit

Special Topics in Public Policy.

For PLCY majors or permission of instructor.

0101	Philip Joyce, J Mihm	Seats (Total: 32)
	M 7:00pm - 9:30pm	VMH 1203

PLCY689Y **Public Policy Topics; Nonprofit Fundraising**

Credits: 3

Grading Method: Regular, Audit

Special Topics in Public Policy.

Restricted to PLCY majors or permission of instructor. Class meets in Room 7878 Diamondback Drive, Suite B.

0101	Robert Grimm, Sara Gallagher	Seats (Total: 30)
	W 7:00pm - 9:30pm	Location: TBA

PLCY689Z **Public Policy Topics; Strategic Management for NonProfit and Public Organizations**

Credits: 3

Grading Method: Regular, Audit

Special Topics in Public Policy.

Contact department for information to register for this course.

PLCY698E **Selected Topics in Public Affairs; Proseminar in Normative Public Policy**

Credits: 3

Grading Method: Regular, Audit

Special topics that arise in public policy.

0101	David Crocker	Seats (Total: 20)
	F 9:15am - 11:45am	VMH 1101

PLCY698I **Selected Topics in Public Affairs; U.S. Immigration Policy: A Retrospective & Contemporary Review of Policy**

Credits: 3

Grading Method: Regular, Audit

Special topics that arise in public policy.

Restricted to PLCY majors or permission of instructor.

0101	M Apolonia Calderon M 7:00pm - 9:30pm	Seats (Total: 10) TLF 1126

PLCY698R **Selected Topics in Public Affairs; Developmental Challenges**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

Restricted to PLCY Majors or permission of instructor.

0101	Susan Parker W 4:15pm - 6:45pm	Seats (Total: 25) VMH 1203

PLCY698T **Selected Topics in Public Affairs; Managing Across Sectors**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

For PLCY Majors or permission of instructor.

Contact department for information to register for this course.

PLCY699F **Selected Topics Public Policy; Ethics of Public Administration**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

For PLCY Majors or permission of instructor.

Contact department for information to register for this course.

PLCY699G **Selected Topics Public Policy; Leadership in Groups and Organization**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

For PLCY Majors or permission of instructor.

Contact department for information to register for this course.

PLCY699K **Selected Topics Public Policy; Civil Conflict**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

For PLCY Majors or permission of instructor.

0101	Benjamin Friedman	Seats (Total: 20)
	Tu 9:15am - 11:45am	VMH 2101F

PLCY699M **Selected Topics Public Policy; Acquisitions in National Security**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

Contact department for information to register for this course.

PLCY699O **Selected Topics Public Policy; 21st Century Policy Challenges**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

For PLCY Majors or permission of instructor.

Contact department for information to register for this course.

PLCY699Z **Selected Topics Public Policy; Energy Policy**

Credits: 3 Grading Method: Regular, Audit

Special topics that arise in public policy.

For PLCY Majors or permission of instructor.

0101	Irving Mintzer	Seats (Total: 20)
	M 4:15pm - 6:45pm	VMH 1101

PLCY711 **Public Management and Leadership**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY711 or PUAF711. Formerly: PUAF711.

Reviews the managerial, political, and ethical problems faced by public sector managers and leaders, including setting an organization's goals, obtaining and protecting a program mandate, designing a service delivery system and implementing a new program.

Contact department for information to register for this course.

PLCY717 **Federal Budgeting: Policy and Process**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY717 or PUAF717. Formerly: PUAF717.

Budgeting as a political and administrative instrument of government. Development of budgeting, the multiple uses of the budget, including role in fiscal policy and resource allocation, the roles and relationships of major participants, and effects of resource scarcity on budgeting behavior. Emphasis on the federal level.

0101	Samuel McCann	Seats (Total: 20)
	W 4:15pm - 6:45pm	VMH 1101

PLCY720 **International Security Policy**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY720 or PUAF720. Formerly: PUAF720.

Reviews the principal features of international security as currently practiced. Traces the evolution of contemporary policy beginning with the initiation of nuclear weapons programs during World War II. Particular emphasis is given to experience of the United States and Russia, since the historical interaction between these two countries has disproportionately affected the international security conditions that all other countries now experience.

0101	Nancy Gallagher	Seats (Total: 20)
	Tu 1:30pm - 4:00pm	VMH 1107

PLCY724 **Problems of Global Security**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY724 or PUAF724. Formerly: PUAF698W and PUAF724.

Explores the international security implications of globalization, presenting evidence indicating that altered circumstances will eventually induce a major redesign of prevailing security arrangements. Includes three segments: 1) a review of the principal problems that have been the focus of established security policy and would be the context for any major adjustment of policy; 2) an assessment of relationships with the major countries where traditional problems are most acutely present; and 3) a review of the organizing principles that can be expected to emerge in the new situation.

Contact department for information to register for this course.

PLCY734 **Foundations of Social Policy**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy. Credit only granted for: PLCY734 or PUAF734. Formerly: PUAF734.

Provides an overview of government's role in social policy and the history of the development of federal and state policies with respect to welfare, aging, education, and housing. Analyzes current federal institutions and legislation in the same policy areas and the demographic history of the United States. Develops skills in analytic writing and presentation of descriptive data.

0101	Peter Reuter	Seats (Total: 20)
	M 4:15pm - 6:45pm	VMH 1207

PLCY737 **Strategies of Equality**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: PLCY737 or PUAF737. Formerly: PUAF698Y and PUAF737.

Concentrates on the institutional and political means by which disadvantaged segments of the United States population have sought to enhance their social, economic and political prospects. Race, gender and disability are the substantive focal points, with considerable attention given to the challanges of African American socio-political uplift. Also explores legislation, litigation, administration, agitation (i.e. protest), and constitutional reform. Students become familiar with alternative conceptions of equality and the modes of argument employed in different institutional and political contexts.

0101	Christopher Foreman	Seats (Total: 20)
	Tu 1:30pm - 4:00pm	VMH 1101

PLCY740 **Public Policy and the Environment**

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY740 or PUAF740. Formerly: PUAF740.

Surveys of major federal environmental legislation; the development and implementation of laws, and alternative ways of thinking about the relationship between humans and the environment.

0201	Alan Miller	Seats (Total: 18)
	Tu 9:15am - 11:45am	VMH 1101

PLCY742 **Environmental Ethics**

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLYC742 or PUAF742. Formerly: PUAF742.

Analyzes issues such as the relation between human beings and nature from the perspectives of the science, history, philosophy, and religion. Considers the bases for policies such as environmental regulation, public lands, and international conventions with respect to the environment.

0101	Thomas Hilde	Seats (Total: 20)
	M 7:00pm - 9:30pm	VMH 2101F

PLCY745 **Human Health and Environmental Policy**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: PLCY745 or PUAF745. Formerly: PUAF745.

Reviews the major human physiological systems and their integrated toxicological functions; considers key bodily defenses; and discusses classic, emerging, and ambiguous risks; in all ecological context. Applies to scientific controversy, the methods of policy formation, such as risk analysis, social-cost analysis, "outcomes" analysis, and decision analysis, all in political-economic context.

0101	Robert Sprinkle	Seats (Total: 24)
	Tu 9:15am - 11:45am	VMH 1107

PLCY752 **Managing Differences:Resolving Conflict and Negotiating Agreements**

Credits: 3

Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY752 or PUAF752. Formerly: PUAF752.

Enhances the student's negotiation and leadership skills for managing differences between individuals and groups. Students study the nature of conflict, learn how to handle two and multiparty conflicts, exerting leadership where there are no hierarchy leaders, and explore the impact of facilitators and mediators on the negotiating process. Blends skill building exercises and theory discussions about the behavior of groups and individuals in groups to understand negotiation dynamics.

Contact department for information to register for this course.

PLCY780 **The American Foreign Policy-Making Process**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY780 or PUAF780. Formerly: PUAF780.

Survey and analysis of the governmental institutions and processes which shape U.S. global engagement on national security and international economic issues. Particular emphasis is given to executive-congressional relations and the broader domestic roots of foreign policy.

0201	Jonas Siegel	Seats (Total: 20)	
	M 1:30pm - 4:00pm	VMH 1107	

PLCY781 **International Economic Policy**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY781 or PUAF781. Formerly: PUAF781.

Issues and choices facing the United States in today's global economy. Primary, but not exclusive, emphasis is given to "competitive interdependence" among advanced industrial societies.

0101	Phillip Swagel	Seats (Total: 40)	
	M 4:15pm - 6:45pm	VMH 1203	
	W 7:00pm - 9:30pm	PKT 1224	Discussion

PLCY782 **International Development Economics**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PUAF698U, PUAF782 or PLCY782. Formerly: PUAF698U and PUAF782.

Examines key current economic and policy issues for developing and transition economies. Topics include inflation stabilization, fiscal policy, selected trade issues, dealing with international capital flows, the role of multilateral organizations, such as the International Monetary Fund and the World Bank, and issues relating to saving, investment and growth.

0101	Susan Parker	Seats (Total: 42)
	M 7:00pm - 9:30pm	VMH 1207

PLCY784 **Disease, Disaster, and Development**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: PUAF699D, PUAF784 or PLCY784. Formerly: PUAF699D and PUAF784.

Studies development, the process by which needy people in fragile societies become self-sufficient people in resilient societies, in relation to disease and disaster, with particular attention to the developed world's response.

0101	Robert Sprinkle	Seats (Total: 20)
	Tu 4:15pm - 6:45pm	VMH 1101

PLCY790 **Project Course**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY790 or PUAF790. Formerly: PUAF790.

Students work at a sponsoring government agency or private firm researching problem of interest to sponsor and relevant to concentration. Emphasis on problem definition, organizing information, and both oral and written presentation of results.

For students taking evaluation-based IDEV project course.

0201	Douglas Besharov, Douglas Call	Seats (Total: 18)
	Th 4:15pm - 6:45pm	VMH 1203
	Contact instructor or department for details.	
	For students with a federal social-policy evaluation-based social policy project.	

0211	Douglas Besharov, Douglas Call Th 4:15pm - 6:45pm Contact instructor or department for details. *For students with a state/local social policy evaluation-based project.*	Seats (Total: 18) VMH 1203
0311	Anand Patwardhan Th 1:30pm - 4:00pm *For students with sustainability-based projects.*	Seats (Total: 10) VMH 1101
0401	I M Mac Destler Th 1:30pm - 4:00pm *For students with international security policy projects.*	Seats (Total: 16) VMH 1107
0411	I M Mac Destler Th 1:30pm - 4:00pm *For students with international economic policy projects.*	Seats (Total: 8) VMH 1107
0501	David Crocker Th 1:30pm - 4:00pm *For students with non-evaluation-based international development projects.*	Seats (Total: 22) VMH 2101F

PLCY798A **Readings in Public Policy**

Credits: 1-3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

Contact department for information to register for this course.

PLCY798B **Readings in Public Policy**

Credits: 1-3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

Contact department for information to register for this course.

PLCY798C **Readings in Public Policy; Science & Technology International Security**

Credits: 3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

0101	Kathleen Vogel W 4:15pm - 6:45pm	Seats (Total: 20) Location: TBA

PLCY798R **Readings in Public Policy; Quantitative Research Methods and Public Policy**

Credits: 3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

0101	Carol Graham W 5:00pm - 9:30pm	Seats (Total: 20) Location: TBA

PLCY798T **Readings in Public Policy; Sustainable Development, Democracy and Human Rights in Peru**

Credits: 3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

Contact department for information to register for this course.

PLCY898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

PLCY899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

PLSC Plant Sciences Spring 2019

PLSC100 **Introduction to Horticulture**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: LL General Education: DSNL

An overview to the art and science of horticulture. Relationships between plant science and plant production, the use of horticultural plants and plant stress as influenced by cultural practices.

Students must pay a $50.00 lab materials fee.

0101	William Phillips, Burkhard Schulz	Seats (Total: 24)	
	TuTh 11:00am - 12:15pm	SHM 2102	
	M 2:00pm - 4:20pm	PLS 1153	Lab
	M 1:00pm - 1:50pm	PLS 1153	Discussion
0102	William Phillips, Burkhard Schulz	Seats (Total: 24)	
	TuTh 11:00am - 12:15pm	SHM 2102	
	Tu 1:30pm - 3:50pm	PLS 1153	Lab
	Tu 12:30pm - 1:20pm	PLS 1153	Discussion
0103	William Phillips, Burkhard Schulz	Seats (Total: 24)	
	TuTh 11:00am - 12:15pm	SHM 2102	
	W 2:00pm - 4:20pm	PLS 1153	Lab
	W 1:00pm - 1:50pm	PLS 1153	Discussion
0104	Burkhard Schulz, William Phillips	Seats (Total: 24)	
	TuTh 11:00am - 12:15pm	SHM 2102	
	Th 1:30pm - 3:50pm	PLS 1153	Lab
	Th 12:30pm - 1:20pm	PLS 1153	Discussion
0105	Burkhard Schulz, William Phillips	Seats (Total: 24)	
	TuTh 11:00am - 12:15pm	SHM 2102	
	M 10:00am - 12:20pm	PLS 1153	Lab
	M 9:00am - 9:50am	PLS 1153	Discussion
0106	William Phillips, Burkhard Schulz	Seats (Total: 24)	
	TuTh 11:00am - 12:15pm	SHM 2102	
	W 10:00am - 12:20pm	PLS 1153	Lab
	W 9:00am - 9:50am	PLS 1153	Discussion
0107	Burkhard Schulz, William Phillips	Seats (Total: 24)	
	TuTh 11:00am - 12:15pm	SHM 2102	
	F 10:00am - 12:20pm	PLS 1153	Lab
	F 9:00am - 9:50am	PLS 1153	Discussion

PLSC226 **Plant Diversity**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLSC201; or permission of instructor.

Students will learn to identify and understand relationships among major plant families of northeastern North America, especially of the Mid-Atlantic region, through lecture, field, and laboratory study. Characteristics and biogeography of and evolutionary relationships among families are emphasized in lecture. These characteristics will be woven together to provide understanding of the ecological and evolutionary drivers of plant diversity and the history of the field. Sight identification of families, genera, and species and keying skills are stressed in field and laboratory sessions.

0101	Maile Neel	Seats (Total: 10)	
	TuTh 12:30pm - 1:45pm	PLS 1162	
	Th 9:30am - 12:20pm	PLS 1153	Lab

PLSC235 **Irrigation and Drainage**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: PLSC235 or PLSC489I. Formerly: PLSC489I.

An overview of U.S. and state water doctrines and plant water use rates Irrigation systems for residential and athletic field use will be discussed covering such topics as hydraulics, sprinkler spacing, pipe selection and sizing, pumps, controllers, valves, and irrigation trouble shooting. Surface and subsurface drainage for turfgrass sites will also be covered.

0101	Geoffrey Rinehart	Seats (Total: 22)
	TuTh 11:00am - 1:00pm	JUL 1111

PLSC251 **Financial Applications for the Green Industry**

Credits: 3 Grading Method: Regular General Education: DSSP

Credit only granted for: PLSC361 or PLSC251. Formerly: PLSC361.

An introduction to the application of financial principles in the Green Industry business sector. Accounting, pricing, and estimating, job cost management and production efficiency are discussed and manifested in Scholarship In Practice exercises, case studies and a business plan project.

0101	Steven Cohan, Dora Cortez	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

PLSC254 **Woody Plants for Mid-Atlantic Landscape II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLSC100 and PLSC253; or permission of instructor.

A field and laboratory study of trees, shrubs, and vines used in ornamental plantings. Major emphasis is placed on introduced and evergreen plant materials.

0101	Lea Johnson WF 1:00pm - 1:50pm F 2:00pm - 4:50pm	Seats (Total: 24) PLS 1140 PLS 1153	 Lab
0102	Lea Johnson WF 1:00pm - 1:50pm F 2:00pm - 4:50pm	Seats (Total: 24) PLS 1140 PLS 1119	 Lab

PLSC271 **Plant Propagation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLSC100; or (BSCI170 and BSCI171); or BSCI105.

A study of the principles and practices in the propagation of plants.

0101	Gary Coleman TuTh 2:00pm - 2:50pm Tu 3:30pm - 5:15pm	Seats (Total: 12) PLS 1117 PLS 1117	 Lab
0102	Gary Coleman TuTh 2:00pm - 2:50pm Th 3:30pm - 5:15pm	Seats (Total: 12) PLS 1117 PLS 1117	 Lab

PLSC272 **Principles of Arboriculture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: PLSC100 and PLSC171. Recommended: ENST200.

The establishment and maintenance of healthy trees in an urban setting will be studied. Lectures will focus on the environmental constraints to tree development in the city, and the role of physiological processes in regulating tree vigor. Laboratory exercises will cover the unique aspects of urban soils, tree valuation procedures, pruning and training, and supervised climbing.

0101	Kenneth Ingram Tu 2:00pm - 4:00pm Th 2:00pm - 5:00pm	Seats (Total: 20) JUL 1123 JUL 1123	 Lab

PLSC275 **Fundamentals of Agricultural Chemistry**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CHEM131 and CHEM132. And PLSC100; or PLSC101; or (BSCI160 and BSCI161); or (BSCI170 and BSCI171); or BSCI105; or BSCI106. Restriction: Must not have completed CHEM104 or CHEM105. And must be in a major within the AGNR-Plant Science & Landscape Architecture department; or must be in a major within the AGNR-Animal & Avian Sciences department; or permission of instructor. Credit only granted for: PLSC275, CHEM104, or CHEM105.

An in-depth discussion of chemistry targeted to students enrolled in plant and animal management curricula offered in AGNR. Covers the nomenclature and basic functional groups in organic chemistry, secondary plant metabolites, basic tenets of organic agriculture and the creation of genetically-modified plants. The chemistry, handling and usage of agricultural pesticides is also discussed.

0101	Burkhard Schulz	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	PLS 1119

PLSC303 **Global Food Systems**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Prerequisite: BSCI170 and BSCI171; or BSCI105; or students who have taken courses with comparable content may contact the department.

An introduction to the global food system and its agricultural, biophysical, and socioeconomic domains. The problems and potentials for increasing world food supply based on current agronomic knowledge. Emphasis on international aspects of food crop production as its interrelationships with people and the environment in the developing world.

0101	Kate Tully	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	PLS 1164

PLSC388 **Honors Thesis Research**

Credits: 3-6 Grading Method: Regular, Pass-Fail, Audit

Undergraduate honors thesis research conducted under the direction of a AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

0101	Instructor: TBA	Seats (Total: 10)
	Contact instructor or department for details.	
	Contact instructor or department for details.	

PLSC399 **Special Problems in Plant Science**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Research projects in Plant Science including field, greenhouse, laboratory, studio and/or library studies. Research is conducted under the direction of a faculty member.

Contact department for information to register for this course.

PLSC400 **Plant Physiology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI170 and BSCI171; or BSCI105; or PLSC201. And CHEM231 and CHEM232; or CHEM237; or permission of AGNR-Plant Science & Landscape Architecture department. Also offered as: BSCI442. Credit only granted for: BSCI442 or PLSC400.

A survey of plant physiology and development responses and adaptation to the environment.

0101	Jose Feijo, Wendy Peer MWF 9:00am - 9:50am Tu 9:00am - 12:00pm	Seats (Total: 24) PLS 1130 PLS 1153	 Lab
0102	Wendy Peer, Jose Feijo MWF 9:00am - 9:50am Tu 4:30pm - 7:30pm	Seats (Total: 24) PLS 1130 PLS 1153	 Lab

PLSC407 **Advanced Crop Science**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLSC101. And BSCI170 and BSCI171; or BSCI105.

A study of principles of production for forage crops, corn, small grains, rice, millets, sorghums, soybeans and other oil seed crops. Their seed production, processing, distribution and the current federal and state seed control programs for these agronomic crops will also be discussed.

0101	William Phillips MWF 12:00pm - 12:50pm	Seats (Total: 20) PLS 1158	

PLSC411 **Plant genetics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI170; and BSCI171. Or PLSC201; or permission of AGNR-Plant Science & Landscape Architecture department.

An introduction to genetic principles and technologies in plants, centered on linking phenotype to genotype. Topics include Mendelian inheritance of single and complex traits, epigenetics, population genetics and plant breeding. Examples on creating and mapping genetic mutations in both model plants and non-model crops are discussed. Current genetic and genomic approaches are highlighted, such as genome engineering and reprogramming, TILLING, and genome-wide association mapping.

0101	Vijay Tiwari, Yiping Qi	Seats (Total: 25)	
	MWF 11:00am - 11:50am	PLS 1146	

PLSC425 **Green Roofs and Urban Sustainability**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: PLSC425 or PLSC489V. Formerly: PLSC489V.

The integration of disciplines associated with sustainability issues. Topics range from plant science to design to policy, all of which can contribute to improving the urban environment.

0101	John Lea-Cox, Andrew Ristvey	Seats (Total: 65)	
	Tu 11:00am - 12:15pm	PLS 1130	

PLSC452 **Environmental Horticulture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLSC100 or PLSC101; and (PLSC253 and PLSC254).

Environmental horticulture principles used in the establishment and maintenance of plant materials in residential and commercial landscapes will be addressed. The effect of soil conditions, environmental factors, and commercial practices will be discussed in relation to the growth and development of newly-installed plant materials. Field diagnostics will be used by students to assess significant problems of plant decline. Environmental sustainability will be combined with current commercial practices of storm water management, nutrient management, and irrigation management to achieve an integrated approach to plant management.

Students must pay a $60.00 lab materials fee.

0101	Carol Allen	Seats (Total: 20)	
	MW 1:00pm - 1:50pm	PLS 1117	
	W 10:00am - 12:50pm	PLS 1117	Lab

PLSC460 **Application of Knowledge in Plant Sciences**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: CS | General Education: DSSP

Prerequisite: PLSC100, PLSC101, or PLSC201; or permission of instructor. Recommended: ENGL393 and ENST200; and (PLSC389 or PLSC399). Restriction: Senior standing or higher. And must be in a major within the AGNR-Plant Science & Landscape Architecture department; or must be in another related major.

A capstone course based on interactions with plant science professional and student-led class discussions. Students will apply their knowledge and experience to practical issues in the discipline, further develop critical thinking ability, and enhance their communication, teamwork, and professional skills. Topics will include nutrient management, integrated pest management, plant interactions with urban and rural ecosystems, planning of public grounds, plant biotechnology, and teaching skills.

0101	Burkhard Schulz, Christopher Walsh, Jianhua Zhu, Angus Murphy, William Phillips	Seats (Total: 30)
	M 2:00pm - 3:50pm	ESJ 1309
	W 2:00pm - 2:50pm	ESJ 1309

PLSC461 **Cultural Management of Nursery and Greenhouse Systems: Substrates**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: PLSC461 or PLSC489T. Formerly: PLSC489T. Additional information: Course material is delivered primarily online, but a four hour face-to-face lecture/lab will be held at the end of the module. PLSC 461, 462 and 464 will be taught sequentially during the semester.

One of three 1-credit modules (PLSC461, PLSC462 and PLSC 464)covering the management techniques used in the intensive culture of plants in commercial operations. Specifically, this module covers the composition, handling, physical and chemical properties of substrates and how they should be managed to maximize plant growth.

0101	John Lea-Cox, Andrew Ristvey	Seats (Total: 17)
	Contact instructor or department for details.	

PLSC462 **Cultural Management of Nursery and Greenhouse Systems; Irrigation**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: PLSC462 or PLSC489W. Formerly: PLSC489W. Additional information: Course material is delivered primarily online, but a four hour face-to-face lecture/lab will be held at the end of the module. PLSC 461, 462 and 464 will be taught sequentially during the semester.

One of three 1-credit modules (PLSC461, PLSC462 and PLSC464) covering the management techniques used in the intensive culture of plants in commercial operations. Specifically, this module covers water quantity and quality issues, water supply (basic hydraulics), irrigation system design and irrigation system evaluation (performance) to maximize water application efficiency.

0101	John Lea-Cox	Seats (Total: 17)
	Contact instructor or department for details.	

PLSC464 **Cultural Management of Nursery and Greenhouse Systems: Nutrients**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: PLSC464 or PLSC489Z. Formerly: PLSC489Z. Additional information: Course material is delivered primarily online, but a four hour face-to-face lecture/lab will be held at the end of the module. PLSC 461, 462 and 464 will be taught sequentially during the semester.

One of three 1-credit modules (PLSC461, PLSC462 and PLSC464) covering the management techniques used in the intensive culture of plants in commercial operations. Specifically, this module covers the basics of fertilization, different fertilization strategies and nutrient use and efficiency, to optimize nutrient application practices in intensive plant production systems.

0101	John Lea-Cox	Seats (Total: 17)
	Contact instructor or department for details.	

PLSC471 **Forest Ecology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLSC201; or (BSCI160 and BSCI161); or BSCI106.

An understanding of the forest ecosystem, its structure and the processes that regulate it are provided. It also considers changes that occur in forests, the interaction of environment and genetics in promoting ecosystem sustainability, and the role of human influences on urban forest ecosystems.

0101	Jessica Sanders	Seats (Total: 50)
	Th 2:00pm - 3:15pm Class time/details on ELMs	PLS 1130 ONLINE

PLSC489L **Special Topics in Plant Science; Scientists Teaching and Translating Science**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

A lecture and or laboratory series organized to study a selected phase of Plant Science not covered by existing courses. Credit according to time scheduled and organization of the course.

Explore methods in pedagogy and andragogy to facilitate science learning. Examine teaching methods, motivation in learning and foundations of assessment.

0101	Melissa Welsh W 10:00am - 11:50am	Seats (Total: 20) PLS 2137	

PLSC489O **Special Topics in Plant Science; Plant Taxonomy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A lecture and or laboratory series organized to study a selected phase of Plant Science not covered by existing courses. Credit according to time scheduled and organization of the course.

Students will learn to identify and understand relationships among major plant families of northeastern North America, especially of the Mid-Atlantic region, through lecture, field, and laboratory study. Characteristics and biogeography of and evolutionary relationships among families are emphasized in lecture. These characteristics will be woven together to provide understanding of the ecological and evolutionary drivers of plant diversity and the history of the field. Sight identification of families, genera, and species and keying skills are stressed in field and laboratory sessions.

0101	Maile Neel TuTh 12:30pm - 1:45pm Th 9:30am - 12:20pm	Seats (Total: 10) PLS 1162 PLS 1153	 Lab

PLSC608T **Research Methods; Supervised Teaching**

Credits: 2 Grading Method: Regular, Audit

An overview of research methods and applications related to plant sciences. Topics covered include current research advances, professional conduct and ethics, and preparation of grant proposals, manuscripts, and scientific presentations.

5201	Christopher Walsh Contact instructor or department for details.	Seats (Total: 5)
6201	Jianhua Zhu Contact instructor or department for details.	Seats (Total: 5)
7501	Wendy Peer Contact instructor or department for details.	Seats (Total: 5)

PLSC618 **Advances in Research; Critiquing Primary Plant Science Literature**

Credits: 1

Grading Method: Regular, Audit

Discussion of advances in plant science research based on classic and current scientific literature.

0101	James Culver	Seats (Total: 15)
	Tu 3:30pm - 4:45pm	PLS 1164

PLSC685 **Advanced Plant Ecophysiology**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: Must have completed one course in plant physiology. Credit only granted for: NRSC685 or PLSC685. Formerly: NRSC685.

Growth, productivity and survival are intimately linded to a plant's ability to adjust to its environment. The information provided in this course is designed to provide an introduction to the basic physical and psysiological principles necessary for understanding the interactions between plants and their environment. The overall objective of this course is to understand plant responses and adaptations to the environment and the ecological relevance of these responses.

Contact department for information to register for this course.

PLSC689C **Special Topics; Conservation Biology**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

Prerequisite: permission of department.

0101	Maile Neel	Seats (Total: 8)
	Contact instructor or department for details.	

PLSC789M **Advances in Research; Plant Membrane Biology**

Credits: 1

Grading Method: Regular, Audit

Discussion of advances in plant science research based on classic and current scientific literature.

0101	Wendy Peer, Angus Murphy	Seats (Total: 10)
	Contact instructor or department for details.	

PLSC799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

PLSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

PLSC899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

PORT Portuguese Spring 2019

PORT104 **Intensive Elementary Portuguese**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score.

Covers speaking, reading, writing, listening, and culture of Portuguese-speaking world.

Contact department for information to register for this course.

PORT204 **Intensive Intermediate Portuguese**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PORT104; or must have appropriate Foreign Language Placement Test (FLPT) score.

Covers speaking, reading, writing, listening, and culture of Portuguese-speaking world.

0101	Thayse Lima	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	JMZ 1226
	W 11:00am - 11:50am	KEY 0123

PORT221 **Introduction to Brazilian Literature**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D

Explores all five regions of Brazil through short stories. Taught in English.

0101	Thayse Lima	Seats (Total: 30)
	Tu 2:00pm - 3:15pm Th 2:00pm - 3:15pm	KNI 1105 JMZ 0208

PORT332 **Brazilian Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Also offered as: FILM332. Credit only granted for: PORT332, FILM332, or PORT378. Formerly: PORT378.

Brazilian films from the late 1950s to the present with a special view to the relationship between cinema, society, historical dates, and social changes in Brazil. Taught in English.

0101	Regina Igel	Seats (Total: 30)
	Tu 11:00am - 12:15pm Th 11:00am - 12:15pm	JMZ 0122 JMZ 0103

PORT386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Permission of ARHU-School of Languages, Literatures, and Cultures department; and junior standing or higher.

Contact department for information to register for this course.

PORT399 **Independent Study in Portuguese**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Specific readings in literature under the supervision of a faculty member of the department.

Contact department for information to register for this course.

PSYC Psychology Spring 2019

The following courses may involve the use of animals. Students who are concerned about the use of animals in teaching have the responsibility to contact the instructor, prior to course enrollment, to determine whether animals are to be used in the course, whether class exercises involving animals are optional or required and what alternatives, if any, are available. The Department of Psychology enforces course prerequisites. Students who do not meet the course prerequisites will be administratively dropped from the course.

PSYC100 **Introduction to Psychology**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SB	General Education: DSHS, DSNS

A basic introductory course, intended to bring the student into contact with the major problems confronting psychology and the more important attempts at their solution.

Discussion sections do not meet until after first lecture. Research requirement: may involve participation in research.

Click here for course syllabus.

0101	Dylan Selterman W 4:00pm - 5:20pm F 9:00am - 9:50am Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 1236 ONLINE	 Discussion Discussion
0102	Dylan Selterman W 4:00pm - 5:20pm F 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 1238 ONLINE	 Discussion Discussion
0103	Dylan Selterman W 4:00pm - 5:20pm F 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 1236 ONLINE	 Discussion Discussion
0104	Dylan Selterman W 4:00pm - 5:20pm F 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 1238 ONLINE	 Discussion Discussion
0105	Dylan Selterman W 4:00pm - 5:20pm F 2:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 1236 ONLINE	 Discussion Discussion
0106	Dylan Selterman W 4:00pm - 5:20pm F 9:00am - 9:50am Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 1236 ONLINE	 Discussion Discussion

0107	Dylan Selterman	Seats (Total: 30)	
	W 4:00pm - 5:20pm	BRB 1101	
	F 11:00am - 11:50am	BPS 1238	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0108	Dylan Selterman	Seats (Total: 30)	
	W 4:00pm - 5:20pm	BRB 1101	
	F 11:00am - 11:50am	BPS 1236	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0109	Dylan Selterman	Seats (Total: 30)	
	W 4:00pm - 5:20pm	BRB 1101	
	F 1:00pm - 1:50pm	BPS 1238	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0110	Dylan Selterman	Seats (Total: 30)	
	W 4:00pm - 5:20pm	BRB 1101	
	F 2:00pm - 2:50pm	BPS 1236	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0201	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	BRB 1101	
	F 9:00am - 9:50am	BPS 0283	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0202	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	BRB 1101	
	F 10:00am - 10:50am	BPS 0283	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0203	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	BRB 1101	
	F 1:00pm - 1:50pm	BPS 0283	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0204	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	BRB 1101	
	F 12:00pm - 12:50pm	BPS 0283	Discussion
	Class time/details on ELMs	ONLINE	Discussion

0205	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm F 2:00pm - 2:50pm Class time/details on ELMs	BRB 1101 BPS 0283 ONLINE	 Discussion Discussion
0206	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm F 9:00am - 9:50am Class time/details on ELMs	BRB 1101 BPS 0283 ONLINE	 Discussion Discussion
0207	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm F 10:00am - 10:50am Class time/details on ELMs	BRB 1101 BPS 0283 ONLINE	 Discussion Discussion
0208	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm F 1:00pm - 1:50pm Class time/details on ELMs	BRB 1101 BPS 0283 ONLINE	 Discussion Discussion
0209	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm F 12:00pm - 12:50pm Class time/details on ELMs	BRB 1101 BPS 0283 ONLINE	 Discussion Discussion
0210	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm F 2:00pm - 2:50pm Class time/details on ELMs	BRB 1101 BPS 0283 ONLINE	 Discussion Discussion

PSYC123 **The Psychology of Getting Hired**

Credits: 1 Grading Method: Regular

Restriction: Must not be in a Robert H. Smith School of Business degree program. Additional information: Cannot be used in place of BMGT367 toward a degree program in the Robert H. Smith School of Business.

Designed to introduce students to the science behind the hiring process and to prepare individuals with the academic and practical training required. Together we will explore psychological principles that influence the selection process and how individuals can apply them for the competitive edge that makes others Fear the Turtle!

0101	Rebecca Weir Class time/details on ELMs	Seats (Total: 100) ONLINE	
0201	Rebecca Weir Class time/details on ELMs	Seats (Total: 100) ONLINE	
0301	Rebecca Weir Class time/details on ELMs	Seats (Total: 100) ONLINE	

PSYC200 **Statistical Methods in Psychology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSAR

Prerequisite: PSYC100. And 1 course with a minimum grade of C- from (MATH107, MATH111, MATH120, MATH130, MATH136, MATH140, STAT100); or must have completed MATH220 with a minimum grade of C-. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

A basic introduction to quantitative methods used in psychological research.

Restricted to PSYC, ENSP and BSCI majors.

Click here for course syllabus.

0101	Meg O'Neill TuTh 8:00am - 9:15am M 9:00am - 9:50am Class time/details on ELMs	Seats (Total: 30) BPS 1250 BPS 1238 ONLINE	 Discussion Discussion
0102	Meg O'Neill TuTh 8:00am - 9:15am M 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 30) BPS 1250 BPS 1238 ONLINE	 Discussion Discussion
0103	Meg O'Neill TuTh 8:00am - 9:15am M 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 30) BPS 1250 BPS 1238 ONLINE	 Discussion Discussion

0104	Meg O'Neill TuTh 8:00am - 9:15am M 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 30) BPS 1250 BPS 1238 ONLINE	 Discussion Discussion
0105	Meg O'Neill TuTh 8:00am - 9:15am M 2:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 30) BPS 1250 BPS 1238 ONLINE	 Discussion Discussion
0201	Meg O'Neill TuTh 9:30am - 10:45am M 9:00am - 9:50am Class time/details on ELMs	Seats (Total: 24) BPS 1243 BPS 1228 ONLINE	 Discussion Discussion
0202	Meg O'Neill TuTh 9:30am - 10:45am M 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 24) BPS 1243 BPS 1232 ONLINE	 Discussion Discussion
0203	Meg O'Neill TuTh 9:30am - 10:45am M 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 23) BPS 1243 BPS 1232 ONLINE	 Discussion Discussion
0204	Meg O'Neill TuTh 9:30am - 10:45am M 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 23) BPS 1243 BPS 1236 ONLINE	 Discussion Discussion
0205	Meg O'Neill TuTh 9:30am - 10:45am M 2:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 23) BPS 1243 BPS 1232 ONLINE	 Discussion Discussion

PSYC221 **Social Psychology**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SB	General Education: DSHS, DSSP

Prerequisite: PSYC100.

The influence of social factors on the individual and on interpersonal behavior. Includes topics such as conformity, attitude change, person perception, interpersonal attraction, and group behavior.

Click here for course syllabus.

0101	Dirk Parham MW 4:00pm - 4:50pm F 2:00pm - 2:50pm	Seats (Total: 150) SHM 2102 BRB 1101	Discussion
0201	Dirk Parham MW 5:00pm - 5:50pm F 3:00pm - 3:50pm	Seats (Total: 150) SHM 2102 BRB 1101	Discussion

PSYC289D **Living the Good Life: The Psychology of Happiness**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS, SCIS

What are the secrets to living a happy life? This course will introduce students to contemporary scientific approaches to studying age-old questions about how to get happy.

0101	Dylan Selterman TuTh 2:00pm - 3:15pm	Seats (Total: 117) BPS 1250

PSYC300 **Research Methods in Psychology Laboratory**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSSP

Prerequisite: PSYC200. Restriction: Must be in Psychology program. Credit only granted for: PSYC300 or PSYC309R. Formerly: PSYC309R.

A general introduction and overview to the fundamental theoretical, conceptual, and practical issues in psychological research in both the laboratory and the field.

Click here for course syllabus.

0101	Tracy Tomlinson TuTh 8:00am - 9:15am Th 2:00pm - 3:50pm	Seats (Total: 16) ESJ 1202 BPS 1228	Discussion
0102	Tracy Tomlinson TuTh 8:00am - 9:15am Th 4:00pm - 5:50pm	Seats (Total: 16) ESJ 1202 BPS 1228	Discussion

0103	Tracy Tomlinson TuTh 8:00am - 9:15am F 8:00am - 9:50am	Seats (Total: 16) ESJ 1202 BPS 1228	Discussion
0104	Tracy Tomlinson TuTh 8:00am - 9:15am F 10:00am - 11:50am	Seats (Total: 16) ESJ 1202 BPS 1228	Discussion
0105	Tracy Tomlinson TuTh 8:00am - 9:15am F 12:00pm - 1:50pm	Seats (Total: 16) ESJ 1202 BPS 1236	Discussion
0106	Tracy Tomlinson TuTh 8:00am - 9:15am F 2:00pm - 3:50pm	Seats (Total: 16) ESJ 1202 BPS 1234	Discussion
0201	Tracy Tomlinson TuTh 9:30am - 10:45am Th 2:00pm - 3:50pm	Seats (Total: 16) ESJ 1202 BPS 1234	Discussion
0202	Tracy Tomlinson TuTh 9:30am - 10:45am Th 4:00pm - 5:50pm	Seats (Total: 16) ESJ 1202 BPS 1234	Discussion
0203	Tracy Tomlinson TuTh 9:30am - 10:45am F 8:00am - 9:50am	Seats (Total: 16) ESJ 1202 BPS 1234	Discussion
0204	Tracy Tomlinson TuTh 9:30am - 10:45am F 10:00am - 11:50am	Seats (Total: 16) ESJ 1202 ARC 1125	Discussion
0205	Tracy Tomlinson TuTh 9:30am - 10:45am F 12:00pm - 1:50pm	Seats (Total: 16) ESJ 1202 BPS 1232	Discussion
0206	Tracy Tomlinson TuTh 9:30am - 10:45am F 2:00pm - 3:50pm	Seats (Total: 16) ESJ 1202 BPS 1232	Discussion

PSYC301 Biological Basis of Behavior

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSNS

Prerequisite: PSYC100. And BSCI170 and BSCI171; or BSCI105.

Recent advances in neuroscience are radically changing our understanding of how the brain works. The course first introduces the structure of the nervous system and the electrical and chemical signals at the core of brain function. Students then explore how the nervous system gathers and makes sense of information from the world around us. The last portion of the course focuses on plasticity, the concept that our brains are constantly changing, and its implications for nervous system development, memory, sexual behavior, sleep, and other complex behaviors.

Restricted to PSYC (major code 20010) students only.

Click here for course syllabus.

0101	David Yager	Seats (Total: 150)
	TuTh 12:30pm - 1:45pm	BPS 1250

PSYC302 **Fundamentals of Learning and Behavior**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100. And BSCI170 and BSCI171; or BSCI105. Restriction: Restricted to psychology majors during the registration period. All other majors will be placed on a hold file. Credit only granted for: PSYC309F or PSYC302. Formerly: PSYC309F.

Overview of the fundamental types of learning that occur without formal instruction. The course covers fundamentals of classical and instrumental conditioning as studied in a variety of species in addition to more modern theories of learning. We will then explore how these principles influence diverse processes such as memory, attention, extinction, categorization, motivation, and in some cases, how they are implemented in the brain and disrupted in disease.

0101	Matthew Roesch	Seats (Total: 50)
	TuTh 12:30pm - 1:45pm	BPS 1236

PSYC309G **Special Topics in Psychology; PREP for Graduate School**

(Perm req)

Credits: 1 | Grading Method: Regular

Topics of current interest which represent extensions of or additions to topics covered in more general topical courses.

What does it take to be a competitive applicant for graduate school? This course will explore graduate school options in psychology and guide students in preparing strong graduate school applications. Restricted to students enrolled in the Psychology Research Empowerment Program.

0101	Nazish Salahuddin W 3:00pm - 3:50pm	Seats (Total: 25) BPS 1140B

PSYC309L **Special Topics in Psychology; Personality and Social Psychology**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Topics of current interest which represent extensions of or additions to topics covered in more general topical courses.

Contact department for information to register for this course.

PSYC309P **Special Topics in Psychology; PREP for Psychology**

(Perm req)

Credits: 1 Grading Method: Regular

Topics of current interest which represent extensions of or additions to topics covered in more general topical courses.

What does it take to be a successful psychology student? This course will expose students to research in psychology, provide opportunities to connect with faculty and staff, and help students maximize their professional development as psychology students. Restricted to students enrolled in the Psychology Research Empowerment Program.

0101	Nazish Salahuddin W 2:00pm - 2:50pm	Seats (Total: 25) BPS 1140B

PSYC319D **Community Interventions: Service Learning**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Apply knowledge gained in PSYC318 to provide interventions to individuals dealing with a community problem. Critical analysis of interventions and related research. Ethical and cultural considerations in the provision of services are addressed.

Prereqs: PSYC318D and Permission of Instructor.

0101	Karen O'Brien MW 8:00am - 9:15am	Seats (Total: 12) BPS 1103

PSYC330 **Child Psychopathology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100. Restriction: Must be in Psychology program. Credit only granted for: PSYC309B or PSYC330. Formerly: PSYC309B.

Etiology, diagnosis, prevention and treatment of emotional disorders of childhood and adolescence.

0101	Lea Dougherty	Seats (Total: 100)
	MW 5:00pm - 6:15pm	BPS 1250

PSYC332 **Psychology of Human Sexuality**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100.

A survey of historical and contemporary psychological views on a wide variety of sexual behaviors; theory and research bearing on the relationship between life span psychological development, psychological functioning, interpersonal processes and sexual behaviors; political and social issues involved in current sexual norms and practices.

Restricted to PSYC (major code 20010) students only.

Contact department for information to register for this course.

PSYC334 **Psychology of Interpersonal Relationships**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100.

Research, theory and their practical applications pertaining to the development, maintenance and dissolution of human relationships. Processes critical to successful relating (e.g., communication, bargaining, conflict resolution), and issues associated with troubled dyadic relations with equal partners (e.g., jealousy, spouse abuse, divorce).

Restricted to PSYC (major code 20010) students only.

Click here for course syllabus.

0101	Seini O'Connor	Seats (Total: 150)
	TuTh 3:30pm - 4:45pm	ESJ 1224

PSYC336 **Psychology of Women**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DSHS

Prerequisite: PSYC100. Also offered as: WMST336. Credit only granted for: PSYC336 or WMST336.

A survey of the biology, life span development, socialization, personality, mental health, and special issues of women.

Students will be expected to meet face-to-face during class time to complete small groupwork on 5-6 Fridays during the semester.

Click here for course syllabus.

0101	Jennifer Brady	Seats (Total: 110)
	MW 11:00am - 11:50am F 11:00am - 11:50am	BPS 1243 ONLINE

PSYC338A **Special Topics in Study Abroad III; Applied Psychology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

PSYC338E **Special Topics in Study Abroad III; Community-Based Research Psychology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

PSYC338G **Special Topics in Study Abroad III; Social Brain: Neuropsychology of Social Behaviors**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

PSYC338L **Special Topics in Study Abroad III; Psychology of Leadership**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

PSYC338N **Special Topics in Study Abroad III; Neuroscience of Fear**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

PSYC338P **Special Topics in Study Abroad III; Positive Psychology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

PSYC341 **Introduction to Memory and Cognition**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC200 and PSYC300.

An introduction to the basic concepts of cognitive psychology, the scientific study of mental processes. Topics will include perception, attention, memory, reasoning, and language, with an emphasis on how findings from cognitive psychology can inform real-life thinking (e.g., memory strategies for studying, pitfalls of multitasking, and how/why our memories can fail us).

Restricted to PSYC (major code 20010) students only.

Click here for course syllabus.

0101	Michael Dougherty	Seats (Total: 117)
	TuTh 12:30pm - 1:45pm	BPS 1243

PSYC353 **Adult Psychopathology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100. Restriction: Must be in Psychology program.

The nature, diagnosis, etiology, and treatment of mental disorders.

Restricted to PSYC majors only.

Click here for course syllabus.

0101	Jack Blanchard	Seats (Total: 117)
	MW 8:00am - 9:15am	BPS 1243

PSYC354 **Multicultural Psychology in the U.S.**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | , D | General Education: DSHS

Prerequisite: PSYC100.

What are the psychological implications of racism, sexism, homophobia and other structures of inequality in the United States? How do socio-cultural privilege and oppression influence individual and group thoughts, feelings, and behaviors? This course will take a current events focus to understanding multicultural and social justice issues in psychology with an emphasis on self-reflection, mental health, cross-cultural communication, and strategies for social change.

Click here for course syllabus.

0101	Nazish Salahuddin MW 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 150) ESJ 2204 ONLINE

PSYC355 **Developmental Psychology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100.

Survey of research and theory of psychological development from conception through childhood, stressing physiological, conceptual and behavioral changes, and the social and biological context in which individuals develop.

Restricted to PSYC (major code 20010) students only.

0101	Tracy Riggins TuTh 11:00am - 12:15pm	Seats (Total: 151) ESJ 2208

PSYC361 **Survey of Industrial and Organizational Psychology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100.

A general survey of the field of industrial organizational psychology including such topics as organizational entry (recruitment, selection, training, socialization); organizational psychology (motivation, leadership, job attitudes); and productivity in the work place (performance appraisal, absenteeism, turnover). The role that the larger environment plays in influencing work behaviors and work attitudes.

Restricted to PSYC (major code 20010) students only.

0101	Jennifer Wessel	Seats (Total: 75)
	TuTh 9:30am - 10:45am	TWS 0320

PSYC362 **Introduction to Negotiation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC221 or PSYC361; or permission of BSOS-Psychology department. Restriction: Must be in Psychology program. Credit only granted for: PSYC309F or PSYC362. Formerly: PSYC309F. Additional information: Restricted to PSYC majors during preregistration.

Overview of the field of negotiation and the social-psychological and contextual factors that facilitate and inhibit successful negotiation agreements. Students will engage in a variety of negotiation exercises individually and as a team.

0101	Michele Gelfand	Seats (Total: 24)
	Tu 3:00pm - 5:30pm	HBK 1112

PSYC389 **Experiential Learning**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Internship in psychology-related fields.

0101	Steven Young	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

PSYC401 **Biological Bases of Behavior Laboratory**

(Perm req)

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC300; and (PSYC301 or BSCI353). Restriction: Permission of instructor; and must be in Psychology program; and must have earned a minimum of 85 credits.

Students will study some of the key concepts in neuroscience by combining behavioral experiments with electrode recording from neurons controlling the behaviors. We will intensively examine concepts like creation of rhythmic behaviors (walking, flight), neurotransmitters control of aggression, drug affects on synaptic activity, high-speed neural circuits for effective escape from predators, and CNS maps in the visual system for directing prey capture. Students will learn microsurgery and a broad range of neural recording techniques. We work with animals (invertebrates, cold-blooded vertebrates) every week. A strong biology background will be beneficial.

0101	David Yager MW 9:00am - 9:50am M 1:00pm - 5:00pm	Seats (Total: 8) BPS 0140 BPS 0263	 Lab
0301	David Yager MW 9:00am - 9:50am W 1:00pm - 5:00pm	Seats (Total: 8) BPS 0140 BPS 0263	 Lab

PSYC404 **Introduction to Behavioral Pharmacology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC301. Restriction: Must be in Psychology program.

Theoretical viewpoints on the interaction of drugs and behavior. Basic principles of pharmacology, the effects of drugs on various behaviors, experimental analysis of drug dependence and abuse, and neuropharmacology and behavior.

Contact department for information to register for this course.

PSYC406 **Neuroethology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC301. Restriction: Must be in Psychology program.

A merger between the disciplines of neuroscience and ethology (animal behavior) studies the behavioral functions of nervous systems using a comparative and evolutionary approach. Students will learn how the nervous system controls behavioral patterns in a variety of different organisms ranging from insects to mammals.

Restricted to PSYC (major code 20010) students only.

0101	Jens Herberholz TuTh 2:00pm - 3:15pm	Seats (Total: 40) BPS 1236	

PSYC411 **Introduction to Functional Magnetic Resonance Imaging**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC200, PSYC301, and PSYC300. Restriction: Must be in a major within BSOS-Psychology department. Credit only granted for: PSYC309N or PSYC411. Formerly: PSYC309N.

An introduction to functional magnetic resonance imaging (fMRI). Students will be taught about formulating testable hypotheses with fMRI, utilizing basic methods in fMRI studies, and understanding existing limitations of fMRI studies in the literature.

0101	Luiz Pessoa TuTh 12:30pm - 1:45pm	Seats (Total: 20) JMZ 0118	

PSYC420 **Experimental Psychology: Social Psychology Laboratory**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC300 and PSYC221. Restriction: Must be in Psychology program; and must have earned a minimum of 85 credits.

A laboratory course to provide a basic understanding of experimental method in social psychology and experience in conducting research on social processes.

Restricted to PSYC (major code 20010) students only.

Click here for course syllabus.

0101	Meg O'Neill MW 10:00am - 10:50am Th 10:00am - 11:50am	Seats (Total: 13) BPS 1236 BPS 0140	 Lab
0102	Meg O'Neill MW 10:00am - 10:50am Th 12:00pm - 1:50pm	Seats (Total: 12) BPS 1236 BPS 0140	 Lab
0201	Edward Lemay MW 11:00am - 11:50am F 10:00am - 11:50am	Seats (Total: 13) BPS 0283 BPS 0140	 Lab
0202	Edward Lemay MW 11:00am - 11:50am F 12:00pm - 1:50pm	Seats (Total: 12) BPS 0283 BPS 0140	 Lab

PSYC424 **Communication and Persuasion**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: PSYC221 and PSYC200.

Effect of social communication upon behavior and attitudes. Theory and research concerning attitude change and social influence.

SG91	Edward Pallas	Seats (Total: 40)
	W 2:00pm - 4:30pm	Location: TBA
	Registration is restricted to Biological Sciences- Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.	

PSYC425 **Psychology and Law**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100, PSYC200, and PSYC300. Restriction: Must be in Psychology program. Credit only granted for: PSYC309K, PSYC325, or PSYC425. Formerly: PSYC309K.

An introduction to the intersection of psychology and the criminal justice sytem, known as the field of legal psychology. The material covered will span the course of the criminal justice process and examine each aspect from a psychological perspective beginning with profiling and moving on to eyewitness memory and judgements through perpetrator memories and interrogation techniques. These apsects will be evaluated with a research lens as well as an applied outlook.

0101	Tracy Tomlinson	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	BPS 1232

PSYC432 **Counseling Psychology: Theories, Research, and Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC200.

Analysis of research and intervention strategies developed and used by counseling psychologists. Historical and current trends in content and methodology.

Restricted to PSYC (major code 20010) students only.

0101	Nazish Salahuddin	Seats (Total: 75)
	MW 11:00am - 11:50am Class time/details on ELMs	ESJ 0215 ONLINE

PSYC433 **Basic Helping Skills: Research and Practice**

Credits: 4 Grading Method: Regular

Prerequisite: PSYC300. Restriction: Must be in Psychology program; and must have earned a minimum of 85 credits; and must not have completed or be concurrently enrolled in EDCP 310. Credit only granted for: EDCP210, EDCP310, or PSYC433.

Theories and research regarding effective helping relationships, with a focus on applications to counseling and psychotherapy. Students will practice helping skills with each other and will conduct research projects evaluating their helping skills. Students should be willing to talk about personal issues in class. Attendance in labs is mandatory and contributes to the course grade; thus, students should only enroll in a lab section that they will be able to attend consistently.

Restricted to PSYC (major code 20010) students only.

Click here for course syllabus.

0101	Beth Richie M 10:00am - 11:50am W 9:00am - 10:50am	Seats (Total: 12) BPS 1250 BPS 1228	 Lab
0102	Beth Richie M 10:00am - 11:50am W 11:00am - 12:50pm	Seats (Total: 12) BPS 1250 BPS 1228	 Lab
0103	Beth Richie M 10:00am - 11:50am W 1:00pm - 2:50pm	Seats (Total: 12) BPS 1250 BPS 1228	 Lab
0104	Beth Richie M 10:00am - 11:50am W 3:00pm - 4:50pm	Seats (Total: 12) BPS 1250 BPS 1228	 Lab
0105	Beth Richie M 10:00am - 11:50am W 11:00am - 12:50pm	Seats (Total: 12) BPS 1250 BPS 1234	 Lab
0106	Beth Richie M 10:00am - 11:50am W 1:00pm - 2:50pm	Seats (Total: 12) BPS 1250 BPS 1234	 Lab
0107	Beth Richie M 10:00am - 11:50am F 8:00am - 9:50am	Seats (Total: 12) BPS 1250 BPS 1232	 Lab

0108	Beth Richie M 10:00am - 11:50am F 10:00am - 11:50am	Seats (Total: 12) BPS 1250 BPS 1234	 Lab
0109	Beth Richie M 10:00am - 11:50am F 12:00pm - 1:50pm	Seats (Total: 12) BPS 1250 BPS 1234	 Lab

PSYC435 **Theories of Personality and Psychotherapy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC200.

Major theories of personality and research methods and findings relevant to those theories.

Contact department for information to register for this course.

PSYC436 **Introduction to Clinical Psychology: From Science to Practice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC300.

Critical analysis of clinical psychology, with particular emphasis on current developments and trends.

Restricted to PSYC (major code 20010) students only.

Click here for course syllabus.

0101	Sarah Racz TuTh 2:00pm - 3:15pm	Seats (Total: 80) BPS 1243

PSYC437 **The Assessment and Treatment of Addictive Behaviors**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100; and 9 credits in PSYC courses. Credit only granted for: PSYC309E (taken in the Winter Term) or PSCY437. Formerly: PSYC309E.

Explores the current research in assessment and treatment of addictive behaviors. Topics may include addictions in the areas of alcohol, drugs, nicotine, gambling, and eating.

Restricted to PSYC (major code 20010) students only.

0101	Cristina Risco	Seats (Total: 33)
	TuTh 3:30pm - 4:45pm	BPS 1238

PSYC442 **Psychology of Language**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC300 and PSYC341. Restriction: Must be in Psychology program.

Introductory survey of the psychology of language, focusing on the cognitive processes that enable us to produce and understand language. Topics include speech perception, speech production, syntactic processing, language development, language disorders, and the brain bases of language.

Restricted to PSYC (major code 20010) students only.

Contact department for information to register for this course.

PSYC468H **Field Experience and Special Assignments in Honors**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

An individual experience arranged by the honors student and his or her supervisor. A proposal submitted to the honors faculty in the semester preceding registration for the course should state the activities anticipated and the method of evaluation.

0101	Michael Dougherty	Seats (Total: 20)
	Th 4:00pm - 4:50pm	BPS 1140A

PSYC469H **Honors Thesis Proposal Preparation**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Development of honors thesis proposal by preliminary research and literature review. Presentation of formal proposal to the thesis committee.

Restricted to undergraduate PSYC majors only.

Contact department for information to register for this course.

PSYC478 **Independent Study in Psychology**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Information about independent study may be obtained in BPS 1121. Restricted to PSYC majors (20010) only. The student must have completed 9 hours in PSYC with at least a 3.0 GPA in PSYC and a 2.8 overall GPA.

Contact department for information to register for this course.

PSYC479 **Special Research Problems in Psychology**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Information about research credit may be obtained in BPS 1121. Restricted to PSYC majors (20010) only. The student must have completed 9 hours in PSYC with at least a 3.0 GPA in PSYC and a 2.8 overall GPA.

Contact department for information to register for this course.

PSYC489B **Advanced Special Topics in Psychology; The Psychology of Adolescents' Close Relationships: Parents, Peers, and Romantic Partners**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Treatment of a specialized topic in psychology.

Prerequisite: PSYC355 or equivalent, or permission of instructor. This course examines the development of close relationships during adolescence, including those with parents, peers, and romantic partners. We examine core developmental themes including nature and nurture, stability and change, and individual differences, and discuss theory, research, and clinical applications.

0101	Jude Cassidy	Seats (Total: 75)
	TuTh 11:00am - 12:15pm	BPS 1243

PSYC489T **Advanced Special Topics in Psychology; The Psychology of Terrorism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Treatment of a specialized topic in psychology.

Prerequisite: PSYC300. This seminar will cover classic and contemporary approaches to the psychology of terrorism. We will discuss theories of radicalization and deradicalization, as well as empirical data on the motivational, cultural and social aspects of becoming a violent extremist.

0101	A Kruglanski	Seats (Total: 20)
	W 3:00pm - 5:30pm	BPS 1232

PSYC499H **Honors Thesis Research**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

In addition to the department and instructor, the director of the honors program may be contacted to obtain a section number. Prerequisite: permission of the thesis advisor. Permission may be obtained in BPS 1147. Restricted to undergraduate PSYC majors only.

Contact department for information to register for this course.

PSYC602 **Quantitative Methods II**

(Perm req)

Credits: 4

Grading Method: Regular, Audit

Prerequisite: PSYC601.

A continuation of PSYC 601. Topics include experimental design, analysi of variance, analysis of covariance, multiple regression, and general linear models.

For all non-psychology graduate students, written permission of the instructor is required.

0101	Paul Hanges	Seats (Total: 20)	
	TuTh 9:00am - 11:00am	BPS 1232	
	Th 5:00pm - 7:00pm	BPS 0140	Lab

PSYC606 **Human Biopsychology**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: PSYC606 or PSYC660. Formerly: PSYC660.

An introductory graduate level course in human psychobiology designed for graduate students with little specific training in this area. Introduction to the comparative and evolutionary approach to the study of human behavior, the biobehavioral basis of human sexuality and social behavior, the physiological basis of higher cortical functions in humans including language, memory, and spatial perception, and an introduction to neuropharmacology.

0101	David Yager	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	BPS 1232

PSYC607 **Advanced Topics in Human-Learning and Cognitive Psychology**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: PSYC607 or PSYC671. Formerly: PSYC671.

A systemic review of major topic areas in the field of human learning and cognition, with emphases on information processes, mental representations, memory, reasoning, problem solving, and language.

0101	Alec Solway	Seats (Total: 20)
	M 9:00am - 11:30am	PLS 1172

PSYC622 **Research Methods in Clinical Psychology**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of instructor. Credit only granted for: PSYC622 or PSYC718. Formerly: PSYC718.

Examines issues and strategies in conceptual systems, designs and methodologies of current research in clinical and community psychology. Readings include critical analyses of published research. Course requirements include preparation of a research proposal for a thesis level study.

0101	Jennifer Belus	Seats (Total: 40)
	W 1:00pm - 3:30pm	BPS 1140A

PSYC623 **Child Psychopathology**

Credits: 3 Grading Method: Regular

Restriction: Permission of instructor; and must be in one of the following programs (Psychology (Master's); Psychology (Doctoral)).

Examines the scientific and clinical literature relevant to normal and pathological behavior in children and adolescents. Issues in developmental psychopathology and consideration of processes initiated in childhood which manifest as pathology in adulthood are also considered.

PCC1	Michael Meinzer	Seats (Total: 40)
	Meets February 25, 2019 - May 17, 2019	
	Th 6:00pm - 9:25pm	BPS 1140B
	Restricted to students in Clinical Psychological Science Program.	

PSYC625 **Clinical Assessment: Psychometric Principles, Testing and Behavior**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of BSOS-Psychology department. Credit only granted for: PSYC625 or PSYC721. Formerly: PSYC721.

An examination of fundamental principles of psychological assessment; application of these principles to the development of evidence-based assessments of clinical conditions and associated behaviors; and application of evidence-based assessments to the evaluation and understanding of clinical conditions evaluated and treated in therapeutic settings.

0101	Andres De Los Reyes	Seats (Total: 10)
	W 9:00am - 11:30am	BPS 1238

PSYC629B **Clinical Laboratory; ASSESSMENT PRACTICUM**

Credits: 1-3 Grading Method: Sat-Fail

Provides advanced supervised experience in the delivery and supervision of mental health interventions targeted to individuals. Supervised work with clients is required.

0101	Andrea Chisolm	Seats (Total: 10)
	Contact instructor or department for details.	

PSYC629C **Clinical Laboratory; ADULT THERAPY PRACTICUM**

Credits: 1-3 Grading Method: Sat-Fail

Provides advanced supervised experience in the delivery and supervision of mental health interventions targeted to individuals. Supervised work with clients is required.

0101	Andrea Chisolm	Seats (Total: 10)
	Contact instructor or department for details.	

PSYC629D **Clinical Laboratory; Child & Adolescent Therapy**

Credits: 1-3 Grading Method: Sat-Fail

Provides advanced supervised experience in the delivery and supervision of mental health interventions targeted to individuals. Supervised work with clients is required.

0101	Mary Byrne	Seats (Total: 10)
	Contact instructor or department for details.	

PSYC630 **Behavioral and Cognitive Behavioral Intervention for Adults**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PSYC680. Restriction: Permission of instructor. Credit only granted for: PSYC630 or PSYC728. Formerly: PSYC728.

Introduces students to the process of therapy with particular focus on behavioral focus on behavioral and cognitive behavioral internentions. Syllabus focuses on theory, research, client diversity, ehtics, and practical aspects of conducting therapy.

0101	Jack Blanchard Tu 12:30pm - 3:15pm *By permission only.*	Seats (Total: 30) BPS 1140B
PCC1	Ryan DeLapp **Meets February 25, 2019 - May 17, 2019** Tu 6:00pm - 9:25pm *Restricted to students in the Clinical Psychological Science Program.*	Seats (Total: 40) BPS 1140B

PSYC638 **Externship in Professional Psychology; Externship in Professional Psychology**

Credits: 1-3 Grading Method: Sat-Fail

Approved appointment as an extern in a mental health setting.

For PSYC majors only.

0101	Lea Dougherty Contact instructor or department for details.	Seats (Total: 25)
0201	Jonathan Mohr Contact instructor or department for details.	Seats (Total: 25)

PSYC639 **Internship in Professional Psychology; Internship in Professional Psychology**

Credits: 1 Grading Method: Sat-Fail

This seminar combines involvement with a program approved appointment a an intern in a mental setting with a supervisory review of the training experience.

For PSYC majors only.

0101	Lea Dougherty Contact instructor or department for details.	Seats (Total: 20)

PSYC654 **Advanced Analytical Thinking: Statistical Methods at Work II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PSYC652 and PSYC653. Restriction: Must be in the Master of Professional Studies in Industrial/Organizational Psychology Program.

Students will delve deeply into issues of interpreting and questioning analytic results. Students will learn how to creatively present empirical results in ways that grab the attention of, and are clear to, a variety of stakeholders. Students will present group projects in two presentations, one to the rest of the class (technical audience) and one to an expert panel of practitioners. Finally, this course will introduce students conceptually to a number of advanced statistical methods, such as meta-analysis and structural equation modeling.

PYP1	Juliet Aiken	Seats (Total: 40)	
	Meets February 25, 2019 - May 17, 2019		
	M 5:00pm - 8:30pm Class time/details on ELMs	BPS 1140B ONLINE	Discussion
	Restricted to students in the MPS Industrial/Organizational Psychology program.		

PSYC655 **Talent Development**

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in the Master of Professional Studies in Industrial/Organizational Psychology Program.

In this course, students will learn how to design and implement effective employee training programs as well as how to encourage informal learning in organizations. This course will review current theories in adult learning (e.g., ADDIE model, action learning, peer feedback/coaching), several popular assessment tools (e.g., MBTI), and best practices for evaluating training programs. Issues relevant to leadership identification and development, including succession planning, will also be covered. As part of this course, students will work in teams to design and deliver a brief training module and practice giving and receiving feedback. Additionally, students will complete, and facilitate a debriefing on, a 360-degree feedback assessment.

PYP1	Kenneth Yusko	Seats (Total: 40)	
	Meets February 25, 2019 - May 17, 2019		
	M 5:00pm - 8:30pm Class time/details on ELMs	BPS 1140B ONLINE	Discussion
	Restricted to students in the MPS Industrial/Organizational Psychology program.		

PSYC690 **Research in Counseling Psychology I**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of instructor. Credit only granted for: PSYC690 or PSYC718. Formerly: PSYC718.

Critical analysis of strategies methodological, conceptual, and content trends.

0101	Charles Gelso	Seats (Total: 10)
	W 11:00am - 2:00pm	BPS 1103

PSYC691 **Research in Counseling Psychology II**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of instructor. Credit only granted for: PSYC691 or PSYC718. Formerly: PSYC718.

Critical analysis of trends and issues in counseling psychology science

0101	Clara Hill	Seats (Total: 10)
	Tu 1:00pm - 4:00pm	BPS 2145

PSYC732 **Selection and Classification Issues in Organizations**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PSYC603; and (PSYC602; or students who have taken courses with comparable content may contact the department). Or permission of instructor.

Consideration of societal, organizational and individual demands for appropriate use of individual differences in (primarily) initial placement of employees. Recruitment, and selection issues, the role of governmental regulations, and the role of individual factors in individual behavior are considered. Extensive coverage given to fundamental psycho-metric problems and the development of individual and organizational criteria of effectiveness.

Designed to provide in-depth exposure to issues concerning job and needs analysis, test validation and training evaluation models and methodology and the area of personnel selection. Personnel selection includes such topics as recruitment, performance evaluation, testing fairness, utility assessment, etc. These various topics will be discussed in the context of theoretical, practical, and legal issues.

0101	Paul Hanges	Seats (Total: 15)
	Tu 1:00pm - 3:30pm	HBK 0125

PSYC737 **Research Methods in Industrial/Organizational Psychology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PSYC603; or permission of instructor.

Philosophy, theory, and method issues underlying I/O psychology. History and the effectiveness of different methods for answering different questions is explored. Reliability and validity are emphasized.

0101	James Grand Th 2:00pm - 4:30pm	Seats (Total: 20) BPS 1103

PSYC748M **Seminar in Social Psychology; The Principles of Motivation**

Credits: 3 Grading Method: Regular, Audit

A seminar on selected topics in social psychology.

We will review and discuss some seminal classic and contemporary papers on motivation focused concepts such as goals attitudes, and their relation to behavior, the initiation, and maintenance of commitment, Issues in intrinsic motivation, the concept of basic human motives, and the role of motivation in behavioral extremism. Participants will read and comment on major contributions in this domain and will be encouraged to develop their ideas as to the future directions of motivational research in social and general psychology.

0101	A Kruglanski M 1:00pm - 3:30pm	Seats (Total: 10) ATL 1106

PSYC789 **Special Research Problems; Special Research Problem**

Credits: 1-4 Grading Method: Regular, Audit

0101	Edward Bernat Contact instructor or department for details.	Seats (Total: 20)
0102	Jack Blanchard Contact instructor or department for details.	Seats (Total: 20)
0103	Andrea Chronis-Tuscano Contact instructor or department for details.	Seats (Total: 20)
0104	Andres De Los Reyes Contact instructor or department for details.	Seats (Total: 20)
0105	Lea Dougherty Contact instructor or department for details.	Seats (Total: 20)
0106	Jessica Magidson Contact instructor or department for details.	Seats (Total: 20)

0107	Alexander Shackman Contact instructor or department for details.	Seats (Total: 20)
0201	Anna Li Contact instructor or department for details.	Seats (Total: 20)
0202	Alec Solway Contact instructor or department for details.	Seats (Total: 20)
0203	Michael Dougherty Contact instructor or department for details.	Seats (Total: 20)
0204	Erica Glasper Andrews Contact instructor or department for details.	Seats (Total: 20)
0205	Jens Herberholz Contact instructor or department for details.	Seats (Total: 20)
0206	Luiz Pessoa Contact instructor or department for details.	Seats (Total: 20)
0207	Matthew Roesch Contact instructor or department for details.	Seats (Total: 20)
0208	Robert Slevc Contact instructor or department for details.	Seats (Total: 20)
0209	David Yager Contact instructor or department for details.	Seats (Total: 20)
0301	Clara Hill Contact instructor or department for details.	Seats (Total: 20)
0302	Derek Iwamoto Contact instructor or department for details.	Seats (Total: 20)
0303	Jonathan Mohr Contact instructor or department for details.	Seats (Total: 20)
0304	Karen O'Brien Contact instructor or department for details.	Seats (Total: 20)
0401	Jonathan Beier Contact instructor or department for details.	Seats (Total: 20)

0402	Jude Cassidy Contact instructor or department for details.	Seats (Total: 20)
0403	Elizabeth Redcay Contact instructor or department for details.	Seats (Total: 20)
0404	Tracy Riggins Contact instructor or department for details.	Seats (Total: 20)
0501	Michele Gelfand Contact instructor or department for details.	Seats (Total: 20)
0502	James Grand Contact instructor or department for details.	Seats (Total: 20)
0503	Paul Hanges Contact instructor or department for details.	Seats (Total: 20)
0504	A Kruglanski Contact instructor or department for details.	Seats (Total: 20)
0505	Edward Lemay Contact instructor or department for details.	Seats (Total: 20)
0506	Instructor: TBA Contact instructor or department for details.	Seats (Total: 20)
0507	Instructor: TBA Contact instructor or department for details.	Seats (Total: 20)
0508	Jennifer Wessel Contact instructor or department for details.	Seats (Total: 20)

PSYC789D **Special Research Problems; Advanced Cognitive Development**

Credits: 1-4 Grading Method: Regular, Audit

Topics will include early knowledge within the physical and social domains, domain-general processes, cognitive architecture, and more. We will contrast different perspectives regarding the joint influence of innate foundations and experience on conceptual development. Although the focus of this course is human development during the first years of life, we will engage evidence from evolutionary, comparative, and adult psychological research as well.

0101	Jonathan Beier	Seats (Total: 15)
	Tu 12:30pm - 3:00pm	JMZ 1226

PSYC789G **Special Research Problems; Neuroplasticity**

Credits: 1-3 Grading Method: Regular, Audit

The term "neuroplasticity" was once a belittled - thought to be a fanciful - notion. However, years of research have overtu rned the doctrine of the unchanging brain. This course examines both animal and human primary literature, along with beautifully described case studies,that have dispelled the decade's long dogma that the brain can be changed in adulthood.

0101	Erica Glasper Andrews	Seats (Total: 15)
	Th 10:00am - 12:00pm	BPS 1140A

PSYC798A **Graduate Seminar; MULTILEVEL MODELING**

Credits: 3 Grading Method: Regular, Audit

Students are provided with an introduction to multilevel modeling techniques (also termed "hierarchical linear models," "mixed effects models," and "random coefficients models"), with an emphasis on applications. Specific topics that are covered include conceptualization and specification of multilevel models, interpretation of parameter estimates, and application in computer programs using existing datasets. Applications will include a) individuals nested withingroups; b) repeated measures/idiographic analysis; c) dyadic studies; d) daily-diary studies; and e) growth-curve modeling. Readings and examples will be drawn from clinical psychology, cognitive psychology, developmental psychology, educational psychology, and social psychology. Students are encouraged to use their own research data for course assingments.

0101	Edward Lemay	Seats (Total: 20)
	W 1:00pm - 3:30pm	LEF 0227

PSYC799 **Master's Thesis Research; MASTERS THESIS RSRCH**

Credits: 1-6 Grading Method: Regular

For PSYC majors only. For all non-psychology graduate students, written permission of the instructor and department is required.

Contact department for information to register for this course.

PSYC888A **Research Methods in Psychology; Developmental Seminar**

Credits: 1-3 Grading Method: Regular, Audit

0101	Jonathan Beier M 1:00pm - 2:30pm	Seats (Total: 10) BPS 1103

PSYC889 **Research Methods in Psychology; Cognitive and Neural Systems Seminar**

Credits: 1-3 Grading Method: Regular, Audit

0101	Anna Li Tu 2:00pm - 2:50pm	Seats (Total: 10) BPS 1234

PSYC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

PSYC899 **Doctoral Dissertation Research; Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

For PSYC majors only. For all non-psychology graduate students, written permission of the instructor and department is required.

Contact department for information to register for this course.

RDEV Real Estate Development Spring 2019

RDEV250 **People, Planet, and Profit: Building Sustainable Places**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Also offered as: ARCH271. Credit only granted for: ARCH271 or RDEV250.

An introduction to building communities, commonly referred to as real estate development and involving multiple professions and disciplines, including Architecture and Urban Design, Community Planning, Historic Preservation, Landscape Architecture, Civil Engineering, Law, Finance and Accounting, that have to come together to build more sustainable places for the future by emphasizing the quadruple bottom line of: (1) financial viability, (2)environmental sensitivity, (3) social/cultural responsibility and (4) sustainable design. The course will provide students with an understanding of the fundamental principles and processes of these disciplines and examine the intersections between them. Students will learn through field studies, lecture, discussion, presentations and interactions with multiple professionals

0101	Heidi Bulich TuTh 11:00am - 12:15pm	Seats (Total: 85) ESJ 2204

RDEV350 **Real Estate Development: Introduction to Principles, Process, and Practice**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: RDEV250 or ARCH271. Restriction: Must be enrolled in the RDEV Minor; and permission of ARCH-School of Architecture, Planning, & Preservation. Credit only granted for: RDEV150 or RDEV350. Formerly: RDEV150.

An introduction to the basic principles of real estate development: How real estate and communities get built and how value is created. The emphasis is on entrepreneurship and an experiential learning approach to the entrepreneurial real estate development process, principles, and practice.

0101	Thomas Kaufman Th 7:00pm - 9:40pm	Seats (Total: 16) ARC 1101
0102	Marcus Ervin Th 7:00pm - 9:40pm	Seats (Total: 25) ASY 3219

RDEV450 **Foundations of Real Estate Finance and Investment**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed RDEV270 or an approved accounting course with a grade of C- or better; and minimum grade of C- in RDEV350. Restriction: Must be enrolled in RDEV Minor; and permission of ARCH-School of Architecture, Planning, & Preservation.

Real Estate Finance and Investment addresses how real estate value is established, the fundamental foundations of the time value of money, as well as more real estate specific applications of return on investment, net operating income, the components of a real estate sources and uses statement, sources of real estate equity and debt financing, commonly used debt ratios and equity returns in real estate, as well as concepts of sensitivity analysis and exit strategies.

0101	John Kirkland Tu 7:00pm - 9:40pm	Seats (Total: 25) ARC 1105
0102	Thomas Dwyer Tu 7:00pm - 9:40pm	Seats (Total: 20) ASY 3219

RDEV600 **Principles and Practice of Real Property Development**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688T or RDEV600. Formerly: RDEV688T.

An introduction to basic principles of real estate development: How real estate and communities get built and how value is created. The emphasis is on entrepreneurship and an experiential learning approach to the entrepreneurial real estate development process, principles, and practice.

0101	Thomas Kaufman	Seats (Total: 30)
	Th 7:00pm - 9:40pm	ARC 1103

RDEV603 **Introduction to Real Property Finance**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of the Department. Credit only granted for: RDEV688Z, RDEV689V, or RDEV603. Formerly: RDEV688Z and RDEV689V.

Introduction to Real Property Finance addresses how real estate value is established, the fundamental foundations of the time value of money, as well as more real estate specific applications of return on investment, net operating income, the components of a real estate sources and uses statement, sources of real estate equity and debt financing, commonly used debt ratios and equity returns in real estate, as well as concepts of sensitivity analysis and exit strategies.

0101	Thomas Dwyer	Seats (Total: 12)
	Tu 7:00pm - 9:40pm	ARC 1103

RDEV610 **Real Property Development Law and Ethics**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688A or RDEV610. Formerly: RDEV688A.

Presents foundational knowledge about real property, contracts, administrative and constitutional law, and ethical principals and reasoning skills.

0101	David Kalinski	Seats (Total: 30)
	M 7:00pm - 9:40pm	ASY 3215

RDEV615 **Principles, Process and Politics of Planning for Real Property Development**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688G or RDEV615. Formerly: RDEV688G.

Designed to introduce and familiarize students with planning and zoning and the associated processes and requirements that impact the real property development process and products. It will look at the roles the community and politics play in shaping the built environment and the development process.

0101	David Freishtat	Seats (Total: 28)
	Th 7:00pm - 9:40pm	ARC 1105

RDEV630 **Real Property Finance and Investment**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV630, RDEV688B, or URSP664. Formerly: RDEV688B.

This course is designed to introduce students who have experience in real estate finance or have taken an introductory course in real estate finance and investment to move to this intermediate course that addresses foundational concepts of commercial real estate finance and the measures used in analyzing and evaluating real estate projects. Quantitative analysis and financial modeling comprise the main focus.

0101	Stephen Alfandre	Seats (Total: 30)
	Tu 7:00pm - 9:40pm	ARC 1101

RDEV650 **Essentials of Design and Construction Management for Development Professionals**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Real Estate Development (Master's) program; or permission of ARCH-Real Estate Development. Credit only granted for: RDEV650 or RDEV688C. Formerly: RDEV688C.

Essential terminology, process and substantative knowledge needed by development professionals to effectively move a project through the design and construction process; includes environmental and ethical considerations throughout the process.

0101	Matthew O'Malley	Seats (Total: 28)
	M 7:00pm - 9:40pm	ARC 1101

RDEV688V **Selected Topics in Real Estate Development; Valuation and Appraisal**

Credits: 3 Grading Method: Regular, Audit

Selected topics in real estate development.

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

RDEV689D **Current Topics in Real Estate Development; Affordable Housing Asset Managment**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Explores a focused aspect in any of the five major phases of real estat development: planning, finance, law, design, construction, or management.

0101	David Jefferson W 7:00pm - 9:40pm	Seats (Total: 15) ARC 1125

RDEV689I **Current Topics in Real Estate Development; Design and Development Competition**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Explores a focused aspect in any of the five major phases of real estat development: planning, finance, law, design, construction, or management.

Prerequisite: Permission of department.

0101	Ronald McDonald W 7:00pm - 9:40pm	Seats (Total: 14) ARC 1127

RDEV689R **Current Topics in Real Estate Development; Retail Real Estate Development and Asset Management**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Explores a focused aspect in any of the five major phases of real estat development: planning, finance, law, design, construction, or management.

Prerequisite: Permission of department.

0101	Nick Egelanian M 7:00pm - 9:40pm	Seats (Total: 15) ARC 1127

RDEV689Y **Current Topics in Real Estate Development; Guided Real Estate Development Project**

(Perm req)

Credits: 1-3

Grading Method: Regular, Audit

Explores a focused aspect in any of the five major phases of real estat development: planning, finance, law, design, construction, or management.

Prerequisite: Permission of department.

0101	Instructor: TBA Tu 7:00pm - 9:40pm	Seats (Total: 10) ARC 1127

RDEV690 **Capstone Project: Real Property Feasibility Study**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Completion of at least 7 RDEV courses. Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688I or RDEV690. Formerly: RDEV688I.

The capstone course is designed to provide students with an opportunity to apply acquired classroom knowledge to real world conditions. Each student in the class will work separately to create a development proposal and feasibility study for an assigned property. For students doing a feasibility study of a development the study will address at least market analysis, entitlement process, construction, and financing for the project.

0101	Tanya Bansal Tu 7:00pm - 9:40pm	Seats (Total: 10) Location: TBA
0102	Tanya Bansal Tu 7:00pm - 9:40pm	Seats (Total: 10) Location: TBA
0103	Tanya Bansal Tu 7:00pm - 9:40pm	Seats (Total: 10) ARC 1125
0104	Tanya Bansal Tu 7:00pm - 9:40pm	Seats (Total: 10) ARC 1123
0105	Tanya Bansal Tu 7:00pm - 9:40pm	Seats (Total: 10) Location: TBA

RELS Religious Studies Spring 2019

RELS170 **Greek and Roman Mythology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Also offered as: CLAS170. Credit only granted for: CLAS170 or RELS170. Additional information: This course cannot be taken for language credit.

An introduction to the mythology of ancient Greece and Rome. This cours is particularly recommended for students planning to major in foreign languages, English, history, the fine arts, or journalism. Taught in English.

0101	Francisco Barrenechea MW 10:00am - 10:50am Th 9:30am - 10:20am	Seats (Total: 25) MMH 1400 SQH 1105	Discussion
0102	Francisco Barrenechea MW 10:00am - 10:50am Th 11:00am - 11:50am	Seats (Total: 25) MMH 1400 SQH 1101	Discussion
0103	Francisco Barrenechea MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) MMH 1400 BPS 1232	Discussion
0104	Francisco Barrenechea MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) MMH 1400 PLS 1113	Discussion
0105	Francisco Barrenechea MW 10:00am - 10:50am Th 12:30pm - 1:20pm	Seats (Total: 25) MMH 1400 SQH 1103	Discussion
0201	Francisco Barrenechea MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 25) MMH 1400 MTH B0427	Discussion
0203	Francisco Barrenechea MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 25) MMH 1400 PLS 1113	Discussion
0204	Francisco Barrenechea MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 25) MMH 1400 PLS 1117	Discussion
0205	Francisco Barrenechea MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 25) MMH 1400 ATL 2416	Discussion

RELS219K **Special Topics in Religious Studies; Reformers, Radicals, and Revolutionaries: The Middle East in the Twentieth Century**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics in Religious Studies

Also offered as HIST245 and ARAB298K. Credit granted for HIST245, ARAB298K, or RELS219K. The 20th century was a period of dramatic changes in the Middle East. Within the global context of the two World Wars and the Cold War, countries in the region struggled with the effects of colonialism and painful processes of decolonization. The course offers a thematic-comparative approach to issues such as social and political reform, nationalism, the colonial experience, independence struggles, models of governance, political violence, and Islamism. Course lectures and the analysis and discussion of primary sources will lead students to understand that the peoples of the Middle East found answers to the challenges posed by Western dominance based on their specific historical, cultural and socio-economic circumstances.

0101	Shay Hazkani	Seats (Total: 40)
	MW 2:00pm - 3:15pm	SQH 1117

RELS269B **Special Topics in Study Abroad II; Buddhism and Culture**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

RELS269G **Special Topics in Study Abroad II; From Asoka to Gandhi: Buddhism and Hinduism in Contemporary Society**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

RELS269P **Special Topics in Study Abroad II; Introduction to Religion**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

RELS289C **New Explorations in Religious Studies; Jews, Christians, and Muslims in Medieval Spain: Tolerance, Oppression, and the Problematic Past**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: DSHS, DVUP, SCIS

Investigation of critical and innovative responses in Religious Studies Although the topic will vary, the course will encourage intellectual exploration by students of fundamental problems and critical methods.

Also offered as HIST289A. Credit only granted for HIST289A or RELS289C. For 800 years, medieval Spain was home to one of the most religiously diverse societies in European history, where Jews, Christians, and Muslims lived and worked closely together. In the modern era, this period has been held up both as a model of successful interreligious harmony, and as a case study in religious discrimination and exclusion. Can the example of the Spanish past really teach us how to build-or how not to build-a society that embraces religious difference?

0101	Janna Bianchini MW 11:00am - 11:50am M 1:00pm - 1:50pm	Seats (Total: 20) SYM 0200 KEY 0117	Discussion
0102	Janna Bianchini MW 11:00am - 11:50am M 2:00pm - 2:50pm	Seats (Total: 20) SYM 0200 KEY 0117	Discussion
0103	Janna Bianchini MW 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 20) SYM 0200 KEY 0117	Discussion
0104	Janna Bianchini MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 20) SYM 0200 KEY 0117	Discussion

RELS289I **What is Religion?**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HO, D	General Education: DSHU, DVCC, SCIS

Draws upon examples from a wide variety of religious traditions to explore the question of what religion is and how to best understand it. Engagement with diverse approaches to religion including phenomenology and the study of "the sacred"; sociology and the study of religious communities; and questions of religious experience, ritual, and identity formation.

0101	Maxine Grossman MW 11:00am - 11:50am W 4:00pm - 4:50pm	Seats (Total: 20) SQH 1120 SQH 1121	Discussion
0102	Maxine Grossman MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 20) SQH 1120 SQH 4116	Discussion

0103	Maxine Grossman MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 20) SQH 1120 SQH 4116	 Discussion
0104	Maxine Grossman MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 20) SQH 1120 SQH 4116	 Discussion

RELS319M **Special Topics in Religious Studies; Lyrics of Mystical Love: Rumi, Song of Songs, and St. Teresa of Avila to Mirabai and Manhae**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in the study of religious history, literature, culture, and thought.

Also offered as PERS398M and CMLT398G. Credit granted for PERS398M, RELS319M, or CMLT398G. A journey through the mystical love poetry of some of the world's most important Jewish, Christian, Muslim, Hindu, and Buddhist mystical poets. Close reading of these poetic masterpieces alongside modern studies of mysticism and mystical poetry by scholars of literature, religious studies, and cognitive science. Taught in English.

0101	Matthew Miller TuTh 3:30pm - 4:45pm	Seats (Total: 20) JMZ 1224

RELS319N **Special Topics in Religious Studies; Introduction to American Indian Cultures of the U.S.**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in the study of religious history, literature, culture, and thought.

Also offered as AMST328N and ANTH468F. Credit granted for AMST328N, ANTH468F or RELS319N. This course surveys the cultures and the historical and contemporary struggles of indigenous peoples of the United States, with a focus on understanding and contrasting the sacred worldviews of indigenous peoples of the U.S. and beyond with the worldviews of both western science and Christianity. It challenges participants to learn more about these worldviews--and about their own worldviews and identities-- through a life-history-based, ethnographic research approach as well as through course readings and class activities and discussions.

0101	L Gordon M 4:00pm - 6:40pm	Seats (Total: 25) PLS 1111

RELS343 **The European Reformations**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: HIST111; or permission of instructor. Also offered as: HIST333. Credit only granted for: HIST333 or RELS343.

Examination of developments in European religion between 1450 and 1700; the late-medieval Church and its critics; rise of Protestant thought in Germany and its spread throughout Europe; reform efforts in the Catholic Church; religious wars and violence and their impact on state and society; consequences of religious reform in society and its impact on the family and women.

Also offered as HIST333. Credit granted for HIST333 or RELS343.

0101	Stefano Villani	Seats (Total: 30)
	TuTh 9:30am - 10:45am	TLF 1101

RELS369C **Special Topics in Study Abroad III; Between Tolerance and Conflict**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

RELS369L **Special Topics in Study Abroad III; Society and Religion in Latin America**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

RELS369R **Special Topics in Study Abroad III; Christianity and the Roman Empire (100-425CE)**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

RELS369Z **Special Topics in Study Abroad III; All Roads Lead to Rome**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

RELS370 **Ancient Greek Religion: Gods, Myths, Temples**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as: CLAS330. Credit only granted for: CLAS330 or RELS370.

Survey of Greek religious ideas and practices as they evolve from the Bronze Age to the early Christian period.

For Spring 2019: Also offered as HIST328V and CLAS330. Credit only granted for CLAS330, HIST328V, or RELS370.

0101	Jorge Bravo	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	KEY 0116

RELS419A **Advanced Topics in Religious Studies; Islamic Memory: The Prophet Mohammed and the Founding Generation of Islam**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

The contemporary study of religion in which topics may address specific religious traditions, regional or historical developments, or methodological and theoretical issues.

Also offered as HIST429Y. Credit granted for RELS419A or HIST429Y.

0101	Antoine Borrut	Seats (Total: 10)
	W 3:30pm - 6:00pm	TLF 2100

RELS499 **Independent Study in Religious Studies**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An advanced independent research project for qualified students, supervised by a faculty member, on a topic not ordinarily covered in available courses.

Contact department for information to register for this course.

RUSS Russian Spring 2019

RUSS102 **Intensive Elementary Russian II**

Credits: 6 Grading Method: Regular, Audit

Prerequisite: RUSS101 or RUSS102; and must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a native/fluent speaker of Russian. Credit only granted for: RUSS102 or (RUSS113 and RUSS114).

A continuation of RUSS101 which will further develop the four skills: reading, writing, listening and speaking with an emphasis on communicative competence.

0101	Inna Hardman MWF 10:00am - 10:50am TuTh 9:30am - 10:45am	Seats (Total: 15) JMZ 0118 JMZ 2122
0201	Inna Hardman MWF 11:00am - 11:50am TuTh 11:00am - 12:15pm	Seats (Total: 15) JMZ 0118 JMZ 2122

RUSS202 **Intermediate Russian II**

Credits: 5 Grading Method: Regular, Audit CORE: HO

Prerequisite: RUSS201; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a native/fluent speaker of Russian.

Continued activation and expansion of skills and knowledge acquired in RUSS201 with the goal of communicative competence.

0101	Zhanna Gerus-Vernola MWF 10:00am - 10:50am TuTh 10:00am - 10:50am	Seats (Total: 15) JMZ 3205 JMZ 3205

RUSS289I **The Power of the Word: Freedom of Speech in the U.S. and Russia**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DSHU, SCIS

0101	Cynthia Martin MW 2:00pm - 3:15pm	Seats (Total: 60) TWS 1310

RUSS302 **Advanced Russian II**

Credits: 3 Grading Method: Regular

Prerequisite: RUSS301.

Advanced training in written Russian communicative structures.

0101	Zhanna Gerus-Vernola MWF 11:00am - 11:50am	Seats (Total: 15) JMZ 1103

RUSS303 **Russian Conversation: Functional Skills**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: RUSS202; or students who have taken courses with comparable content may contact the department.

Intended for students who do not anticipate having the opportunity to study in Russia. Skills for daily life (both function and etiquette) and argumentation (rhetoric).

0101	Anastasiia Selemeneva	Seats (Total: 15)
	TuTh 9:30am - 10:45am	JMZ 1226

RUSS329E **Soviet Literature in Translation; History, Fiction, Cinema**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Russian literature between 1917 and the fall of the Soviet Union, both as a continuation of pre-revolutionary traditions and as a reflection of Soviet ideology.

This course considers the way that literature and cinema reflect, refract, react to, and make history. Works of Soviet literature and cinema will be considered in terms of their relationship to historical events of the twentieth century, including the Russian Revolution and Civil War, the Stalin era, the Second World War, and beyond. All readings and discussion are conducted in English.

0101	Elizabeth Papazian	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	JMZ 2207

RUSS386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Restriction: Junior standing or higher; and permission of ARHU-School of Languages, Literatures, and Cultures department.

Contact the department to obtain section numbers.

Contact department for information to register for this course.

RUSS402 **Practicum in Written Russian**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: RUSS401; or students who have taken courses with comparable content may contact the department.

Designed to improve comprehension of functional varieties of written Russian and develop ability to present in written form concise syntheses of source texts.

0101	Cynthia Martin	Seats (Total: 15)
	MWF 11:00am - 11:50am	JMZ 3122

RUSS439D **Selected Topics in Russian Literature; Dostoevsky's Crime and Punishment: Modernity and the City**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Presentation of a topic in Russian literature.

A close reading of the novel by Dostoevsky, in the original Russian. Intended for students who have completed RUSS302. Students currently enrolled in RUSS302 by permission of the instructor.

0101	Elizabeth Papazian	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	JMZ 2123

RUSS499 **Independent Study in Russian**

(Perm req)

Credits: 1-3 Grading Method: Regular

Independent study under faculty supervision.

Contact department for information to register for this course.

RUSS798 **Independent Study**

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

RUSS799 **Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

SLAA Second Language Acquisition and Application Spring 2019

SLAA410 **Second Language Acquisition: Theory, Research, and Practice**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: LING200, LING240, PSYC200, PSYC221, or PSYC354.

Introduces vibrant and expanding branch of language science and cognitive science: theory, research and practice in SLA. Students apply what they learn to practical issues ranging from learning languages as an adult to societal problems involving second languages and dialects.

0101	Michael Long	Seats (Total: 25)
	MW 2:00pm - 3:15pm	JMZ 1122

SLAA498 **Second Language Research and Practicum**

(Perm req)

Credits: 1-3 Grading Method: Regular

Individualized research and practicum for undergraduate students to work as Undergraduate Research Assistants (UGRA) on existing projects under the supervision of a PhD Graduate Supervisor (GS) in the area of second language acquisition to learn/experience how second language as well as psycholinguistic research is conducted.

Contact department for information to register for this course.

SLAA620 **Second Language Research Methodologies**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: SLAA610; and must have completed or be concurrently enrolled in SLAA611.

An exploration of research methodology in second language acquisition (SLA), with a focus on developing practical skills in data analysis and interpretation. Preparation in both critical evaluation of existing research and design of new research models.

0101	Robert De Keyser	Seats (Total: 15)
	M 2:00pm - 4:30pm	JMZ 1103

SLAA640 **Psycholinguistics**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: SLAA610; or permission of ARHU-School of Languages, Literatures, and Cultures department.

An introduction to the field of psycholinguistics that covers speech perception, word recognition, sentence and discourse processing, speech production, and language acquisition. Basic concepts, research methods, major research topics, leading theories and related research findings, with implications of psycholinguistic theories and findings for second language studies.

0101	Nan Jiang	Seats (Total: 10)
	Tu 5:00pm - 7:30pm	JMZ 2120

SLAA649R **Special Topics in Second Language Acquisition; Research Critique**

Credits: 3 Grading Method: Regular, Audit

Current topics in research in second language acquisition.

0101	Kira Gor	Seats (Total: 10)
	Th 5:00pm - 7:30pm	JMZ 1117

SLAA719 **Second Language Acquisition and Application Internship**

Credits: 3 Grading Method: Regular, Audit

Internship at a site to be determined. Topics may include heritage language learning, immersion education, testing and assessment, translation and interpretation, and national language planning and policy.

Contact department for information to register for this course.

SLAA742 **Second Language Processing**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of instructor required for MA students.

Covers leading theoretical approaches and experimental methods in secon language processing. Draws on research and theories in Second Language Acquisition (SLA), formal linguistics, cognitive grammar, psycholinguistics, and neurolinguistics.

0101	Nan Jiang	Seats (Total: 10)
	Th 2:00pm - 4:30pm	JMZ 0103

SLAA749B **Special Topics in Second Language Learning; Individual Differences**

Credits: 3 Grading Method: Regular, Audit

Current topics in research on Second Language Learning.

0101	Robert De Keyser W 2:00pm - 4:30pm	Seats (Total: 15) JMZ 1103

SLAA749G **Special Topics in Second Language Learning; Second Language Pragmatics**

Credits: 3 Grading Method: Regular, Audit

Current topics in research on Second Language Learning.

0101	Steven Ross F 2:00pm - 4:30pm	Seats (Total: 15) JMZ 2120

SLAA754 **Task-Based Language Teaching**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: SLAA649T or SLAA754. Formerly: SLAA649T.

Overview of Task-Based Language Teaching (TBLT) including needs and means analysis, syllabus design, materials writing, methodology and pedagogy, testing, and evaluation. Theoretical issues addressed include relationship of TBLT to research findings on the psychology of learning and SLA and libertarian approaches to education.

0101	Michael Long M 5:00pm - 7:30pm	Seats (Total: 15) JMZ 1117

SLAA779 **Directed Research in Second Language Acquisition and Application**

Credits: 1-3 Grading Method: Regular, Audit

Directed independent research in Second Language Acquisition or Application. In this capstone project, students engage in independent research under faculty direction.

Contact department for information to register for this course.

SLAA798 **Master's Independent Study**

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

SLAA799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

SLAA888 **Doctoral Independent Study**

Credits: 1-3 Grading Method: Regular, Audit

Individual instruction course.

Contact department for information to register for this course.

SLAA898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

SLAA899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

SLLC School of Languages, Literatures and Cultures Spring 2019

SLLC109K **Beg Less Commonly Taught Language II; Japanese, Part 2**

Credits: 3 Grading Method: Regular

Study of any of the less commonly taught languages at the elementary level, as a continuation of SLLC108 (in the same language). Speaking, listening, reading, and writing a less commonly taught language. Development of an emphasis on oral proficiency skills.

Prerequisite: JAPN106 or SLLC109J. Credit only granted for JAPN107, SLLC109K, or JAPN102.

0101	Etsuko Yamakita	Seats (Total: 15)
	MWF 12:00pm - 12:50pm	JMZ 1103

SLLC109V **Beg Less Commonly Taught Language II; Vietnamese II**

Credits: 4 Grading Method: Regular

Study of any of the less commonly taught languages at the elementary level, as a continuation of SLLC108 (in the same language). Speaking, listening, reading, and writing a less commonly taught language. Development of an emphasis on oral proficiency skills.

Prerequisite: SLLC108V. The second semester of first-year Vietnamese is a Big Ten Academic Alliance CourseShare online course. The instructor is at Michigan State University, but you enroll and receive credit for it at Maryland. You will need to be entered into the Michigan State University course management system Desire to Learn (D2L). For more information about this course, including textbook information and instructions on enrolling in D2L, please see http://go.umd.edu/turkish. Heritage speakers and those with prior knowledge of Vietnamese need to contact the Course Coordinator at MSU before enrolling in the course to determine appropriate placement - Ms. Danielle Steider at 517-355-5105 or steider@msu.edu. As this is an online course, you do NOT need to be on campus in orderin to start the course. Although this is an online course, it is NOT self-paced. There are weekly assignments and two required virtual meetings per week.

0101	Instructor: TBA	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

SLLC169L **Special Topics in Study Abroad I; Basque Language and Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SLLC209J **Intermediate Less Commonly Taught Language II; Japanese**

(Perm req)

Credits: 3-6 Grading Method: Regular

Second semester Intermediate-level work on speaking, reading, and writing a less commonly taught language. Continued development of oral proficiency skills.

Contact department for information to register for this course.

SLLC269D **Special Topics in Study Abroad II; Catalan Language and Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SLLC299J **Special Topics in World Cultures; Comparative Mythology: Art, Myth: Mind and More**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Topic to be announced when course is offered.

Examination of universality in human myths and what could account for it. Insights from cultural and literary studies, art history, linguistics, cognitive psychology, paleoanthropology, population dynamics and other such disciplines in the humanities and the social sciences are brought to bear on the question. Students will take a hands-on approach to mythologies within their local environment, attempting to place them within the context of other mythologies and what commonalities may reveal abouttheir society and the human mind.

0101	Juan Uriagereka	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	JMZ 1224

SLLC299R **Special Topics in World Cultures; Elementary Italian I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Topic to be announced when course is offered.

Contact department for information to register for this course.

SLLC299Z **Special Topics in World Cultures; Spanish Civilization and Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Topic to be announced when course is offered.

Contact department for information to register for this course.

SLLC309 **Language Partner Program**

(Perm req)

Credits: 1 Grading Method: Regular

For intermediate- to advanced-level language study. Conversations entirely in target language with native speaker.

Students must be available to meet on Monday, February 11, 2019 and Monday, May 6, 2019.

0101	Mehl Penrose	Seats (Total: 2)
	Meets February 12, 2019 - May 7, 2019	
	M 4:00pm - 5:50pm	Location: TBA
	Contact instructor or department for details.	
	Arabic Students must be available to meet on Monday, February 11, 2019 and Monday, May 6, 2019	

0102	Mehl Penrose	Seats (Total: 3)
	Meets February 12, 2019 - May 7, 2019	
	M 4:00pm - 5:50pm Contact instructor or department for details.	Location: TBA
	Chinese Students must be available to meet on Monday, February 11, 2019 and Monday, May 6, 2019.	
0103	Mehl Penrose	Seats (Total: 3)
	Meets February 12, 2019 - May 7, 2019	
	M 4:00pm - 5:50pm Contact instructor or department for details.	Location: TBA
	French Students must be available to meet on Monday, February 11, 2019 and Monday, May 6, 2019.	
0104	Mehl Penrose	Seats (Total: 2)
	Meets February 12, 2019 - May 7, 2019	
	M 4:00pm - 5:50pm Contact instructor or department for details.	Location: TBA
	German Students must be available to meet on Monday, February 11, 2019 and Monday, May 6, 2019.	
0105	Mehl Penrose	Seats (Total: 2)
	Meets February 12, 2019 - May 7, 2019	
	M 4:00pm - 5:50pm Contact instructor or department for details.	Location: TBA
	Italian Students must be available to meet on Monday, February 11, 2019 and Monday, May 6, 2019.	
0106	Mehl Penrose	Seats (Total: 4)
	Meets February 12, 2019 - May 7, 2019	
	M 4:00pm - 5:50pm Contact instructor or department for details.	Location: TBA
	Japanese Students must be available to meet on Monday, February 11, 2019 and Monday, May 6, 2019.	
0109	Mehl Penrose	Seats (Total: 3)
	Meets February 12, 2019 - May 7, 2019	
	M 4:00pm - 5:50pm Contact instructor or department for details.	Location: TBA
	Russian Students must be available to meet on Monday, February 11, 2019 and Monday, May 6, 2019.	

0110	Mehl Penrose	Seats (Total: 4)
	Meets February 12, 2019 - May 7, 2019	
	M 4:00pm - 5:50pm Contact instructor or department for details.	Location: TBA
	Spanish Students must be available to meet on Monday, February 11, 2019 and Monday, May 6, 2019.	

SLLC369A **Special Topics in Study Abroad III**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SLLC369D **Special Topics in Study Abroad III; Art and Dictatorship**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SLLC369E **Special Topics in Study Abroad III; Experiments in Czech Film**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SLLC386 **Experiential Learning**

Credits: 3 Grading Method: Regular, Pass-Fail

Prerequisite: Learning Proposal approved by the Office of Experiential Learning Programs, faculty sponsor and the student's internship sponsor. Restriction: Junior standing or higher.

Contact department for information to register for this course.

SLLC698I **Special Topics in Interdisciplinary Studies; Islamicate Studies**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Cross-departmental or cross-programmatic study within the School of Languages, Literatures, and Cultures. Topic to be announced when course is offered.

0101	Matthew Miller	Seats (Total: 1)
	Contact instructor or department for details.	

SLLC698Z **Special Topics in Interdisciplinary Studies; Nuclear Futures: Theorizing Environmental Humanities for the Post-Fukushima Age**

Credits: 3 Grading Method: Regular, Audit

Cross-departmental or cross-programmatic study within the School of Languages, Literatures, and Cultures. Topic to be announced when course is offered.

Also offered as CMLT679Z, GERM689Z and FREN699Z. Credit granted for CMLT679Z, SLLC698Z, GERM689Z or FREN699Z. This seminar interrogates the concept of futurity in the context of environmental activism and artistic engagement with atomic issues from 1945 to the present, focusing on Germany and Japan. We will engage with theoretical developments in the environmental humanities, including readings on the Anthropocene, precarity, and neoliberal capitalism. The course draws on a wide range of written materials and media, including personaltestimonies, poetry, fiction, film, manga, music, performance and documentation of protests. Taught in English.

0101	Hester Baer, Michele Mason	Seats (Total: 20)
	W 4:30pm - 7:00pm	JMZ 3203

SLLC789 **Master's Independent Study**

Credits: 1-3 Grading Method: Regular

Contact department for information to register for this course.

SLLC889 **Doctoral Independent Study**

Credits: 1-3 Grading Method: Regular

Contact department for information to register for this course.

SOCY Sociology Spring 2019

SOCY100 **Introduction to Sociology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

The fundamental concepts and principles of sociology. Includes consideration of culture, patterns of social interaction, norms, values, social institutions, stratification, and social change.

0101	Robert Pernick MWF 10:00am - 10:50am	Seats (Total: 60) ASY 1213
0201	Alex Parkhouse TuTh 2:00pm - 3:15pm	Seats (Total: 60) ASY 2309
0301	Andres Villarreal TuTh 3:30pm - 4:45pm	Seats (Total: 80) ASY 1213
0401	Lester Andrist MWF 1:00pm - 1:50pm	Seats (Total: 60) ASY 1213
0501	Alex Parkhouse TuTh 9:30am - 10:45am	Seats (Total: 98) ASY 2309

SOCY105 **Introduction to Contemporary Social Problems**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

An examination of contemporary social problems through sociological perspectives; ways in which social problems are part of the organization of society; a detailed study of selected social problems including social conflict and social inequality.

0201	Amanda Dewey TuTh 11:00am - 12:15pm	Seats (Total: 60) ASY 1213
0301	Yu Guo TuTh 3:30pm - 4:45pm	Seats (Total: 60) ASY 2309
0401	Daniel Swann MWF 9:00am - 9:50am	Seats (Total: 60) ASY 2309
0601	Zsuzsa Daczo TuTh 2:00pm - 3:15pm	Seats (Total: 60) ASY 1213

SOCY105H **Introduction to Contemporary Social Problems**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

An examination of contemporary social problems through sociological perspectives; ways in which social problems are part of the organization of society; a detailed study of selected social problems including social conflict and social inequality.

0101	Brian Connor MWF 2:00pm - 2:50pm	Seats (Total: 25) ASY 3221	

SOCY110 **The Logic of Social Inquiry: An Introduction to Sociology and the Major**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Additional information: To be taken prior to, or in the first 30 credits after declaring sociology as a major.

Introduction to the logic of social science research; the integration of theory and methods in the development of sociological knowledge; basic sociological concepts; and departmental research streams. Required of all sociology majors.

0101	Brian Connor MWF 10:00am - 10:50am	Seats (Total: 78) TWS 1310	

SOCY120 **Veterans in American Society: What does America Owe Its Veterans?**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, SCIS

An examination of current and past policies toward compensation for military veterans, data and evidence on current and past adjustments to life after military service, historical variations in the mechanisms for staffing the military, and trends in the contours of the lives of those who do not serve.

0101	Meredith Kleykamp MW 11:00am - 11:50am F 9:00am - 9:50am	Seats (Total: 22) ASY 1213 ASY 3207	Discussion
0201	Meredith Kleykamp MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 22) ASY 1213 ASY 3207	Discussion
0301	Meredith Kleykamp MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 22) ASY 1213 ASY 3203	Discussion

SOCY200 **Human Societies**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS, SCIS

A comparative, historical, interdisciplinary study of human socieities that focuses on the main components of human societies, how they are organized, how they change, and how they come to shape our collective social existence.

0101	John Pease MW 2:00pm - 3:15pm F 9:00am - 9:50am	Seats (Total: 20) ASY 2203 ASY 3203	 Discussion
0102	John Pease MW 2:00pm - 3:15pm F 10:00am - 10:50am	Seats (Total: 20) ASY 2203 ARC 1101	 Discussion
0103	John Pease MW 2:00pm - 3:15pm F 11:00am - 11:50am	Seats (Total: 20) ASY 2203 ASY 3207	 Discussion
0104	John Pease MW 2:00pm - 3:15pm F 12:00pm - 12:50pm	Seats (Total: 20) ASY 2203 ASY 3207	 Discussion
0106	John Pease MW 2:00pm - 3:15pm F 1:00pm - 1:50pm	Seats (Total: 15) ASY 2203 ASY 3207	 Discussion

SOCY201 **Introductory Statistics for Sociology**

(Perm req)

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit | General Education: FSAR

Prerequisite: SOCY100; and (MATH107 or MATH111). Or students who have taken courses with comparable content may contact the department. Restriction: Must not have completed STAT400, BMGT231, or ENEE324. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Elementary descriptive and inferential statistics. Construction and percentaging of bivariate contingency tables; frequency distributions and graphic presentations; measures of central tendency and dispersion; parametric and nonparametric measures of association and correlation; regression; probability; hypothesis testing; the normal, binomial and chi-square distributions; point and interval estimates.

0101	Alan Neustadtl TuTh 11:00am - 12:15pm W 10:00am - 11:50am	Seats (Total: 15) ASY 2309 LEF 0231	 Lab
0103	Alan Neustadtl TuTh 11:00am - 12:15pm W 12:00pm - 1:50pm	Seats (Total: 15) ASY 2309 LEF 0229	 Lab
0104	Alan Neustadtl TuTh 11:00am - 12:15pm W 12:00pm - 1:50pm	Seats (Total: 15) ASY 2309 LEF 0231	 Lab

SOCY202 **Introduction to Research Methods in Sociology**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: SOCY201; or permission of BSOS-Sociology department.

The underlying logic, major strategies, specific techniques and skills of sociological research. Research design, measurement, data collection, sampling, field research experiments, surveys, index and scale construction, data analysis, interpretation and report writing.

0101	Wei-hsin Yu MW 2:00pm - 3:15pm F 10:00am - 11:50am	Seats (Total: 20) ASY 2309 LEF 0231	 Lab
0102	Wei-hsin Yu MW 2:00pm - 3:15pm F 10:00am - 11:50am	Seats (Total: 20) ASY 2309 LEF 0229	 Lab
0103	Wei-hsin Yu MW 2:00pm - 3:15pm F 12:00pm - 1:50pm	Seats (Total: 20) ASY 2309 LEF 0229	 Lab
0104	Wei-hsin Yu MW 2:00pm - 3:15pm F 12:00pm - 1:50pm	Seats (Total: 20) ASY 2309 LEF 0231	 Lab

SOCY203 **Sociological Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SOCY100.

Development of the science of sociology; historical backgrounds; recent theories of society. Required of all sociology majors.

Required for all SOCY majors.

0101	Meyer Kestnbaum TuTh 2:00pm - 3:15pm	Seats (Total: 78) TWS 1310

SOCY224 **Why are We Still Talking About Race?**

Credits: 3 | Grading Method: Regular | General Education: DSHS, SCIS

Exploration of the major debates and assumptions that construct individual perceptions of what race is and how race matters. Sociological and sub-cultural theories will give students a historical and present day frame with which to view race and ethnic relations in the twenty first century.

0101	Nicole Cousin-Gossett TuTh 9:30am - 10:45am	Seats (Total: 78) TWS 1310

SOCY227 **Introduction to the Study of Deviance**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: SB | General Education: DSHS

Credit only granted for: SOCY227 or SOCY327. Formerly: SOCY327.

An introduction to the sociological study of deviant behavior, covering such topics as mental illness, sexual deviance, and the use of drugs.

0101	Mollie Greenberg MWF 10:00am - 10:50am	Seats (Total: 47) ASY 3203
0201	Zsuzsa Daczo TuTh 9:30am - 10:45am	Seats (Total: 45) ASY 3203

SOCY230 **Sociological Social Psychology**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS

Theoretical perspectives and their applications. Socialization through the life course, the self-concept, attitudes, emotion, attribution, interpersonal relations, group processes, deviance, and social change.

0101	Rashawn Ray TuTh 12:30pm - 1:45pm	Seats (Total: 180) ASY 2203	

SOCY243 **Family and Society**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Credit only granted for: SOCY243 or SOCY443. Formerly: SOCY443.

An exploration of empirical patterns and trends, political and cultural debates, and policy issues including the major theories and research methods used in the sociological study of the family.

0101	Philip Cohen MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 20) ASY 3215 HBK 0105	Discussion
0301	Philip Cohen MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 13) ASY 3215 HBK 0109	Discussion

SOCY298D **Selected Topics in Sociology; African-American Health Disparities and Social Justice**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in Sociology.

Also offered as AASP298D and HLTH298D. Credit granted for AASP298D, HLTH298D or SOCY298D.

0101	Caryn Bell MW 2:00pm - 3:15pm	Seats (Total: 35) HBK 0105

SOCY325 **The Sociology of Gender**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Prerequisite: 3 credits in SOCY courses. Also offered as: WMST325. Credit only granted for: SOCY325 or WMST325.

Institutional bases of gender roles and gender inequality, cultural perspectives on gender, gender socialization, feminism, and gender-role change. Emphasis on contemporary American society.

0101	Lester Andrist	Seats (Total: 60)
	MWF 12:00pm - 12:50pm	ASY 2309

SOCY335 **Sociology of Health and Illness**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

An exploration of the social model to studying health and illness: how meanings and experiences of health and illness are socially produced. How experiences are shaped by the interaction of external social environments (culture, community) and the internal environment (human body), and by socio-demographic variables (race, class, gender, etc.). Disparities in health and healthcare delivery, medicalization of society, determinants of health, social construction of illness, and the social organization of health care.

0101	Alex Parkhouse	Seats (Total: 80)
	TuTh 12:30pm - 1:45pm	ASY 1213

SOCY370 **Transition from Undergrad to Professional**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prepares Sociology majors to make the transition from undergraduate to entering graduate school and/or the professional work world. Topics include career options in Sociology, skills for conducting a job search, resume writing and interview preparation, and the graduate application process.

0101	Nicole DeLoatch	Seats (Total: 15)
	W 1:00pm - 2:50pm	ASY 1117

SOCY380 **Honors Independent Reading in Sociology**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of BSOS-Sociology department. Formerly: SOCY378.

This course permits sociology honor students to undertake a program or reading on a particular problem in sociology or a subfield therein. The reading will be done under the supervision of a member of the sociology faculty. Required of sociology honor students.

0101	Instructor: TBA	Seats (Total: 10)
	Contact instructor or department for details.	

SOCY381 **Honors Independent Research in Sociology**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SOCY380. Formerly: SOCY388.

This course permits sociology students to define a particular problem in sociology or a subfield therein and to develop a research plan for use as a thesis topic. The work will be done under the supervision of a member of the sociology faculty.

Contact department for information to register for this course.

SOCY383 **Honors Thesis Research**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SOCY381. Formerly: SOCY389.

Student research under the direction of a member of the sociology faculty, culminating in the presentation and defense of a thesis reporting the research.

Contact department for information to register for this course.

SOCY386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Restriction: Permission of BSOS-Sociology department; and junior standing or higher.

To register, students must have departmental permission form signed by instructor and by Coordinator of Sociology Undergraduate Program.

Contact department for information to register for this course.

SOCY398G **Special Topics in Sociology; Global Migration and the Israeli Case Study**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to both sociology majors and non-majors.

Also offered as ISRL343. Credit granted for ISRL349K, GVPT368G, SOCY398G, SOCY398I, or ISRL343. Over 70% of Israel's population is made of first, second or third generation immigrants, who came from over 70 countries, making Israel an ultimate immigrant society. This course will focus on the history of Israel as a case study for the understanding of the historical phenomena of modern immigration.

0101	Pnina Peri	Seats (Total: 35)
	MW 2:00pm - 3:15pm	BPS 0283

SOCY398L **Special Topics in Sociology; Service Learning**

(Perm req)

Credits: 1

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to both sociology majors and non-majors.

0101	Instructor: TBA	Seats (Total: 20)
	Contact instructor or department for details.	

SOCY398Q **Special Topics in Sociology; The Holy City and the Holy Mountain: a Sociological look at the Old City of Jerusalem and the Tempe Mount**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to both sociology majors and non-majors.

An exploration of Jerusalem's Old City as the home of multiple holy places and of 20,000 people of varied and ancient communities through archaeology, religion, geography, politics, and, especially using sociological tools, as well as an examination of current conflicts. Also offered as ISRL448Q. Credit granted for ISRL448Q or SOCY398Q.

0101	Instructor: TBA	Seats (Total: 25)
	Contact instructor or department for details.	

SOCY398T **Special Topics in Sociology; Identity and Culture in Italy: A Comparative Approach**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to both sociology majors and non-majors.

Contact department for information to register for this course.

SOCY398V **Special Topics in Sociology; Theories of Nation Building: Israel as a Case Study**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to both sociology majors and non-majors.

Also offered as ISRL349J. Credit only granted for ISRL349J or SOCY398V. Since Israel was established in 1948, the education system has played a major role in developing the Israeli identity. We will examine dominant discourses and debates pertaining to Israeli culture identity, such as the centrality of the Holocaust, security issues, minorities, religious education, role of literature in national narrative, the role of politics in citizenship education and contemporary debates over History education.

0101	Pnina Peri	Seats (Total: 35)
	MW 3:30pm - 4:45pm	BPS 0283

SOCY398Y **Special Topics in Sociology; Issues in African Development**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to both sociology majors and non-majors.

Also offered as AASP398D, GEOG398A, and GVPT359F. Credit granted for SOCY398Y, AASP398D, GEOG398A, or GVPT359F.

0101	Sangeetha Madhavan	Seats (Total: 20)
	W 2:00pm - 4:30pm	HBK 0108

SOCY399 **Independent Study in Sociology**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Integrated reading or research under the direction and supervision of a faculty member. A maximum of 6 credits may be earned by a student for the same field experience in SOCY386 and SOCY399 combined.

No more than 6 hours of 399 is allowed for credit.

Contact department for information to register for this course.

SOCY399G **Independent Study in Sociology; Social Policy, Social Exclusion**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Integrated reading or research under the direction and supervision of a faculty member. A maximum of 6 credits may be earned by a student for the same field experience in SOCY386 and SOCY399 combined.

Contact department for information to register for this course.

SOCY401 **Intermediate Statistics for Sociologists**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SOCY201; or students who have taken courses with comparable content may contact the department; or permission of BSOS-Sociology department. Restriction: Must not have completed STAT400, BMGT231, or ENEE324.

This is a course about multiple regression for undergraduate students and presumes that students taking this course will be both producers and consumers of multiple regression results. Students will work with the instructor to produce a research poster presentation based on secondary social science data. In addition to multivariable statistics, students will learn some statistical programming as well as how to organize a research presentation.

0101	Alan Neustadtl	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ASY 1101

SOCY405 **Scarcity and Modern Society**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses. Credit only granted for: SOCY305 or SOCY405. Formerly: SOCY305.

Resource depletion and the deterioration of the environment. Relationship to lifestyles, individual consumer choices, cultural values, and institutional failures. Projection of the future course of American society on the basis of the analysis of scarcity, theories of social change, current trends, social movements, government actions, and the futurist literature.

0101	Kurt Finsterbusch	Seats (Total: 29)
	TuTh 9:30am - 10:45am	ASY 3219

SOCY410 **Social Demography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of BSOS-Sociology department.

Types of demographic analysis; demographic data; population characteristics; migration; mortality; fertility; population theories; world population growth; population policy.

0101	Sonalde Desai	Seats (Total: 29)
	MW 2:00pm - 3:15pm	KEY 0116

SOCY411 **Demographic Techniques**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: (SOCY201; or students who have taken courses with comparable content may contact the department); and SOCY410. Or permission of BSOS-Sociology department.

Basic techniques for analyzing population structure and demographic processes, including fertility, mortality and migration.

0101	Joan Kahn	Seats (Total: 29)
	TuTh 11:00am - 12:15pm	ASY 3207

SOCY412 **Family Demography**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses. Formerly: SOCY312.

Family and population dynamics. Fertility issues, such as teenage pregnancy, the timing of parenthood, and family size; as they relate to family behavior, such as marital patterns, child care use, and work and the family. Policy issues that relate to demographic changes in the family.

0101	Feinian Chen	Seats (Total: 29)
	TuTh 11:00am - 12:15pm	HBK 0105

SOCY413 **Sociology of Aging**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 2 courses in SOCY. Credit only granted for: SOCY498D or SOCY413. Formerly: SOCY498D.

The aging of the population is one of the major demographic changes affecting social institutions during the next century. Research demography, sociology, economics, epidemiology, psychology and public health are integrated to develop a broader understanding of the causes and consequences of population aging. A central focus is the diversity of experiences by age, gender, socioeconomic status and health.

0101	Joan Kahn	Seats (Total: 29)
	TuTh 2:00pm - 3:15pm	ASY 3207

SOCY415 **Environmental Sociology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses. Credit only granted for: SOCY498E or SOCY415. Formerly: SOCY498E.

Overview of the field and theoretical themes within the area of environmental sociology and technology. Current issues are explored including: environmental attitudes; environmental movements; environmental justice; globalization; global climate change; and garbage and food.

0101	Dana Fisher	Seats (Total: 29)
	TuTh 12:30pm - 1:45pm	ASY 3203

SOCY424 **Sociology of Race Relations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of BSOS-Sociology department. Also offered as: AAST424. Credit only granted for: AAST424 or SOCY424.

Analysis of race-related issues, with a primary focus on American society. The historical emergence, development, and institutionalization of racism; the impact of racism on its victims; and racially based conflict.

Contact department for information to register for this course.

SOCY431 **Principles of Organizations**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of BSOS-Sociology department.

Structural and processual characteristics of organizations that make them effective for different purposes and in different environments. Effects of different institutional environments, small group processes, organizational networks, and leadership. Types of organizations studied include formal bureaucracies, professional organizations, and voluntary associations.

0101	Robert Pernick	Seats (Total: 29)
	MWF 12:00pm - 12:50pm	ASY 3211

SOCY432 **Social Movements**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of BSOS-Sociology department.

Movements that seek change in the social and political structure of society. Origins, tactics, organization, recruitment, and success. Case studies come from such movements as labor, civil rights, student, feminist, environmental, neighborhood, and gay rights.

0101	Wayne Santoro	Seats (Total: 29)
	TuTh 11:00am - 12:15pm	ASY 3203

SOCY435 **Society, Biology, and Health**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

"It is not too far-fetched to speak of the pancreas under capitalism or the proletarian lung."Humans are social beings in physical bodies. In this course, we draw on research studies, podcasts, news articles, and best-selling non-fiction to inform conversation and writing on how various dimensions of human biology influence, and are influenced by, our social and cultural environment. We focus on conceptualizing human behavior as an interplay between both nature and nurture, and consider how this approach changes our understanding of modern social problems. This course is appropriate for students with a range of backgrounds in the social and natural sciences; introductory-level supplemental readings on all necessary biological concepts will be provided.

0101	Amelia Branigan	Seats (Total: 29)
	MW 3:00pm - 4:15pm	JMZ 0103

SOCY441 **Social Stratification and Inequality**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of BSOS-Sociology department. Restriction: Junior standing or higher.

The sociological study of social class, status, and power. Topics include theories of stratification, correlates of social position, functions and dysfunctions of social inequality, status inconsistency, and social mobility.

0101	John Pease	Seats (Total: 80)
	TuTh 9:30am - 10:45am	ASY 1213

SOCY442 **The Black Middle Class**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses. Credit only granted for: SOCY498T or SOCY442. Formerly: SOCY498T.

Students will learn about the Black Middle Class. They will examine and explore the historical context that led to the rise of a Black Middle Class. Innovative avenues into the Black Middle Class will also be examined, including various household and family formations. Finally, the course will cover the consequences of being in the The Black Middle Class, with an emphasis on residential segregation and racial identity.

0101	Melissa Brown	Seats (Total: 29)
	TuTh 12:30pm - 1:45pm	ASY 3207

SOCY448 **Research in Social Psychology; GROUP PROCESSES**

Credits: 3 Grading Method: Regular, Audit

This is the special topics research course in Social Psychology

0101	Jeffrey Lucas	Seats (Total: 29)
	MW 11:00am - 11:50am Class time/details on ELMs	ASY 3203 ONLINE

SOCY467 **Sociology of Education**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of BSOS-Sociology department.

Sociological analysis of educational institutions and their relation to society: goals and functions, the mechanisms of social control, and the impacts of stratification and social change. Study of the school as a formal organization, and the roles and subcultures of teachers and students.

Contact department for information to register for this course.

SOCY480 **Researching the Middle East**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in SOCY201, SOCY202, and SOCY203. Credit only granted for: SOCY498E or SOCY480. Formerly: SOCY498E.

Introduces religion, gender, and politics in the Middle East and North Africa. After an overview of the political and social history the focus will be on methods for carrying out fundamental issues facing Middle Eastern societies, including national identity, religion, gender relations and the status of women in the family, politics, education, and labor market.

Also offered as GVPT459U. For Spring 2019 credit only granted for SOCY480, SOCY498E or GVPT459U.

0101	Mansoor Moaddel	Seats (Total: 29)
	TuTh 3:30pm - 4:45pm	ASY 3215

SOCY481 **Ideology and Social Conditions in the Making of Terrorism in the Middle East and North Africa**

Credits: 3 Grading Method: Regular

Restriction: Sophomore standing or higher.

The sociology of terrorism and political violence in the Middle East and North African will be explored in this course.

0101	Mansoor Moaddel	Seats (Total: 19)
	TuTh 12:30pm - 1:45pm	ARC 1123

SOCY498 **Selected Topics in Sociology**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in sociology. Such courses will be offered in response to student request and faculty interest.

Contact department for information to register for this course.

SOCY498C **Selected Topics in Sociology; Sociology of Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in sociology. Such courses will be offered in response to student request and faculty interest.

0101	Brian Connor	Seats (Total: 29)
	MWF 1:00pm - 1:50pm	ASY 3211

SOCY498K **Selected Topics in Sociology; Youth, Resistance, and Social Control**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in sociology. Such courses will be offered in response to student request and faculty interest.

Contact department for information to register for this course.

SOCY498L **Selected Topics in Sociology; Global Social Policy**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in sociology. Such courses will be offered in response to student request and faculty interest.

Contact department for information to register for this course.

SOCY498P **Selected Topics in Sociology; Sociology of Cities**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in sociology. Such courses will be offered in response to student request and faculty interest.

Contact department for information to register for this course.

SOCY498T **Selected Topics in Sociology; Black Middle Class**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in sociology. Such courses will be offered in response to student request and faculty interest.

Contact department for information to register for this course.

SOCY498Z **Selected Topics in Sociology; Pratical Sociology**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduates in sociology. Such courses will be offered in response to student request and faculty interest.

Contact department for information to register for this course.

SOCY499 **Advanced Undergraduate Research in Sociology**

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

For advanced undergraduate students conducing research under the direct supervision of a faculty member. Each student is required to produce a final product that will be graded by their supervisor. A maximum of 3 credits may be earned by a student for this course.

1201	Kris Marsh Contact instructor or department for details.	Seats (Total: 10)
1801	Mansoor Moaddel Contact instructor or department for details.	Seats (Total: 10)

4801	Amy McLaughlin Contact instructor or department for details.	Seats (Total: 10)
6401	Long Doan Contact instructor or department for details.	Seats (Total: 10)
6901	Nicole Cousin-Gossett Contact instructor or department for details.	Seats (Total: 10)

SOCY602 **Statistics For Sociological Research II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SOCY601; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor. Credit only granted for: SOCY602 or SURV602.

This course introduces regression analysis using matrix algebra. Topics include bivariate regression, multivariate regression, tests of significance, regression diagnostics, indicator variables, interaction terms, extra sum of squares, and the general linear model. Other topics may be addressed such as logistic regression and path analysis. Statistical programming software may be used.

0101	Monica Caudillo W 3:30pm - 6:00pm	Seats (Total: 20) ASY 1101

SOCY605 **Experimental Methods in Sociology**

Credits: 3 Grading Method: Regular

Prerequisite: SOCY601.

Experimental methodologies will be explored at the graduate course level in Sociology.

0101	Meredith Kleykamp M 3:30pm - 6:00pm	Seats (Total: 20) ASY 1101

SOCY626 **Demography of Aging**

Credits: 3 Grading Method: Regular, Audit

Examines the demographic foundations of population aging, focusing on macro and historical patterns as well as on trends in mortality health and disability. Also examines the relationship between aging and social institutions such as the family, the economy and public policy.

0101	Joan Kahn	Seats (Total: 20)
	Tu 3:30pm - 6:00pm	ASY 2115

SOCY633 **Qualitative Research Methods II, Field Research**

Credits: 3 Grading Method: Regular

Prerequisite: SOCY632; or students who have taken courses with comparable content may contact the department.

As the second course in the qualitative methods sequence, students are expected to have a general knowledge of qualitative methods. Students should have already learned how to collect and analyze qualitative data using interview and ethnographic methods. Student will spend this semester collecting and analyzing qualitative data and must begin the course with a formulated research question, a plan for data collection and sampling. Each student will spend the first two weeks preparing a proposal for submission the the University of Maryland's Institutional Review Board to gain Human Subjects approval to collect data. Then, students will spend a month collecting data, a month analyzing data using QSR NVivo, which will be taught as part of the coursework, and writing up the findings. The end product of the course will be an empirical paper based on the data collected and analyzed throughout the semester.

0101	Dana Fisher	Seats (Total: 20)
	Tu 3:30pm - 6:00pm	ASY 1101

SOCY653 **Family Demography**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of instructor.

Demograpic perspective on family and household relationships; relationships among economic institutions, family structure, and the content of family life; research from contemporary U.S., historical and cross-cultural sources.

0101	Philip Cohen	Seats (Total: 20)
	M 6:30pm - 9:00pm	ASY 1101

SOCY655 **Social Movements and Race**

Credits: 3 Grading Method: Regular

Racial/ethnic minority movements in the US will be investigated, including protest movements by African Americans, Mexican Americans, Arab Americans, Native Americans, Asian Americans, and Puerto Ricans. We will pay special attention to understanding these movements through the lens of social movement theory and sensitizing concepts (e.g., political process theory, framing, political opportunity structure, repression, collective identity). We will also interrogate ways that movement processes and theoretical tools may be racially invariant and strive to uncover how approaches used by scholars who study race (e.g., intersectionality, critical race theory, racialization) can be applied and perhaps challenge social movement scholarship.

0101	Wayne Santoro W 6:30pm - 9:00pm	Seats (Total: 20) ASY 1101

SOCY660 **Theories of Social Psychology**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed an undergraduate training in sociological research methods, statistics, and theory; or students who have taken courses with comparable content may contact the department.

An introduction to some of the theories in social psychology that are particularly useful to sociologists. Topics to be covered include theories of cognitive consistency, social exchange, symbolic interaction, role theory, group processes, and collective behavior.

0101	Rashawn Ray Th 3:30pm - 6:00pm	Seats (Total: 20) ASY 1101

SOCY665 **Gender Stratification**

Credits: 3 Grading Method: Regular, Audit

Feminist theory, methodology, and research on the social construction of gender and sexuality and the social stratification of groups assigned to these categories, and their interaction with race, class, and other dimensions of stratification.

0101	Wei-hsin Yu M 3:30pm - 6:00pm	Seats (Total: 11) ASY 2115

SOCY682 **Critical Race Theory**

Credits: 3 Grading Method: Regular

Students will gain an in-depth understanding of the latest theory and research in Critical Race Theory.

0101	Kris Marsh	Seats (Total: 20)
	Th 6:30pm - 9:00pm	ASY 1101

SOCY699 **Special Social Problems**

Credits: 1-16 Grading Method: Regular

Contact department for information to register for this course.

SOCY699E **Special Social Problems; Critical Race Initiative**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Permission of instructor required.Please contact instructor or department for details.

0101	Kris Marsh	Seats (Total: 10)
	Contact instructor or department for details.	

SOCY699M **Special Social Problems; Proseminar**

Credits: 2 Grading Method: Regular, Audit

0101	Roberto Korzeniewicz	Seats (Total: 10)
	Contact instructor or department for details.	

SOCY699N **Special Social Problems; Intermediate Sociological Statistics**

Credits: 1 Grading Method: Regular, Audit

0101	Monica Caudillo	Seats (Total: 20)
	F 2:00pm - 4:00pm	LEF 0227

SOCY699V **Special Social Problems; Contexting Sociology**

Credits: 1 Grading Method: Regular

Restricted to Sociology graduate students.

0101	Rashawn Ray	Seats (Total: 10)
	F 11:00am - 11:50am	ASY 4111

SOCY699W **Special Social Problems; Combined Master's Research Paper**

Credits: 3 Grading Method: Regular, Audit

0101	Nicole Cousin-Gossett	Seats (Total: 10)
	Contact instructor or department for details.	

SOCY701 **Issues in the Integration of Theory and Method**

Credits: 3 Grading Method: Sat-Fail

Prerequisite: Must have attained advanced status in the sociology Ph.D. program; or permission of instructor. Credit only granted for: SOCY699Y or SOCY701. Formerly: SOCY699Y.

The course is intended solely for advanced doctoral sociology students. The main objective of the course is to develop a dissertation proposal. Consequently, this course may only be taken during or after the semester in which the student completes the specialty (comprehensive) exams.

0101	Stanley Presser	Seats (Total: 20)
	W 4:00pm - 6:30pm	ASY 2115

SOCY799 **Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

SOCY819 **Research Seminar in Social Psychology**

Credits: 1 Grading Method: Regular, Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in social psychology.

0101	Jeffrey Lucas	Seats (Total: 10)
	Contact instructor or department for details.	

SOCY829 **Research Seminar in Sociological Theory**

Credits: 1 Grading Method: Regular, Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in sociological theory.

0101	Meyer Kestnbaum	Seats (Total: 10)
	Contact instructor or department for details.	

SOCY849 **Research Seminar in Demography**

Credits: 1 Grading Method: Regular, Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in demography.

0101	Sonalde Desai	Seats (Total: 10)
	Contact instructor or department for details.	

SOCY858 **Research Seminar in Gender, Work and Family**

Credits: 1 Grading Method: Regular, Audit

An advanced research seminar for students preparing to do research or take the specialty examination in Gender, Work and Family.

0101	Liana Sayer	Seats (Total: 10)
	Contact instructor or department for details.	

SOCY869 **Research Seminar in Military Sociology**

Credits: 1 Grading Method: Regular, Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in military sociology.

0101	Meredith Kleykamp	Seats (Total: 20)
	Contact instructor or department for details.	

SOCY889 **Research Seminar in Social Stratification**

Credits: 1 Grading Method: Regular, Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in stratification.

0101	Philip Cohen	Seats (Total: 10)
	Contact instructor or department for details.	

SOCY898 **Pre-Candidacy Research**

(Perm req) Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

SOCY899 **Doctoral Dissertation Research**

(Perm req) Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

SPAN Spanish Spring 2019

SPAN103 **Intensive Elementary Spanish**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a native/fluent speaker of Spanish. Credit only granted for: SPAN102 or SPAN103.

Covers speaking, reading, writing, listening, and culture of Spanish-speaking world.

0101	Katherin Solano MWF 10:00am - 10:50am Tu 10:00am - 10:50am	Seats (Total: 25) JMZ 0205 JMZ 0205
0201	Katherin Solano MWF 11:00am - 11:50am Tu 11:00am - 11:50am	Seats (Total: 25) JMZ 0103 JMZ 0103
0301	Carla Onate MTuWF 12:00pm - 12:50pm	Seats (Total: 25) JMZ 0103
0401	Carla Onate MTuWF 1:00pm - 1:50pm	Seats (Total: 25) JMZ 0103

SPAN169L **Special Topics in Study Abroad I; Spanish Language A1**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN169M **Special Topics in Study Abroad I; Spanish Language A2**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN169O **Special Topics in Study Abroad I; Beginner Spanish I**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN169P **Special Topics in Study Abroad I; Beginner Spanish II**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN169X **Special Topics in Study Abroad I; Elementary Spanish I**

Credits: 2-6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN169Y **Special Topics in Study Abroad I; Elementary Spanish II**

Credits: 2-6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN203 **Intensive Intermediate Spanish**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: SPAN103; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a native/fluent speaker of Spanish.

Covers speaking, reading, writing, listening, and culture of Spanish-speaking world.

0101	Juan Diaz MWThF 10:00am - 10:50am	Seats (Total: 25) JMZ 0208
0201	Juan Diaz MWF 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 25) JMZ 1124 TWS 1320
0301	Ofelia Montelongo Valencia MWThF 11:00am - 11:50am	Seats (Total: 25) JMZ 0122
0401	Daniela Hernandez MWF 12:00pm - 12:50pm Th 12:00pm - 12:50pm	Seats (Total: 25) JMZ 3205 JMZ 0120
0501	Daniela Hernandez MWF 1:00pm - 1:50pm Th 1:00pm - 1:50pm	Seats (Total: 25) JMZ 0118 JMZ 0120
0601	Ofelia Montelongo Valencia MWF 1:00pm - 1:50pm Th 1:00pm - 1:50pm	Seats (Total: 25) JMZ 0208 JMZ 0103
0701	Jose Magro MWF 2:00pm - 2:50pm Th 2:00pm - 2:50pm	Seats (Total: 25) JMZ 3120 JMZ 1120

SPAN204 **Spanish Grammar Review**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO

Prerequisite: SPAN203; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Not open to fluent/native speakers of Spanish.

An in-depth study and analysis of selected grammatical topics in a contextualized framework.

0101	Sofia Maurette MWF 10:00am - 10:50am	Seats (Total: 25) JMZ 0125
0201	Rosario de Fatima Montero Navarro TuTh 11:00am - 12:15pm	Seats (Total: 25) JMZ 0205

0301	Sofia Maurette MWF 1:00pm - 1:50pm	Seats (Total: 25) JMZ 2120

SPAN206 **Spanish for Heritage Speakers I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Native or near native knowledge of and no formal education in Spanish.

Review of oral and written Spanish for students who have native or near native knowledge of, but no formal education in Spanish. Taught in Spanish.

0101	Evelyn Canabal-Torres MWF 10:00am - 10:50am	Seats (Total: 25) JMZ 3120

SPAN207 **Reading and Writing in Spanish**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Prerequisite: Minimum grade of B+ in SPAN203; or must have completed or be concurrently enrolled in SPAN204; or must have appropriate Foreign Language Placement Test (FLPT) score.

Selected readings with emphasis on reading comprehension and the development of reading strategies. Work in composition writing and a review of selected grammatical topics. Complements material of SPAN204.

0101	Chila Hidalgo MWF 10:00am - 10:50am	Seats (Total: 25) JMZ 2207
0201	Chila Hidalgo MWF 1:00pm - 1:50pm	Seats (Total: 25) JMZ 2122
0301	Chila Hidalgo MWF 2:00pm - 2:50pm	Seats (Total: 25) JMZ 0118
0401	Daniela Bulansky TuTh 11:00am - 12:15pm	Seats (Total: 25) JMZ 1122
0501	Jackson Monzon TuTh 12:30pm - 1:45pm	Seats (Total: 25) JMZ 3120

SPAN235 **Issues in Latin American Studies II**

Credits: 3 | Grading Method: Regular | CORE: HO, D | General Education: DSHS, DSHU, DVUP

Also offered as: PORT235, LASC235. Credit only granted for: LASC235, PORT235, or SPAN235.

Major issues shaping Latin American and Caribbean societies including the changing constructions of race, ethnicity, gender and class as well as expressions of popular cultures and revolutionary practices. A continuation of SPAN/PORT/LASC234, but completion of 234 is not a prerequisite. Taught in English.

0101	Britta Anderson TuTh 11:00am - 12:15pm	Seats (Total: 30) BPS 1238
0201	Britta Anderson TuTh 9:30am - 10:45am	Seats (Total: 30) JMZ 2206

SPAN269A **Special Topics in Study Abroad II; B1 Intermediate Level Spanish I**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN269B **Special Topics in Study Abroad II; B1 Intermediate Level Spanish II**

Credits: 6 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN269I **Special Topics in Study Abroad II; Intensive Intermediate Spanish**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN269L **Special Topics in Study Abroad II; Spanish Language B1**

Credits: 6 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN269V **Special Topics in Study Abroad II; Identities and Stereotypes in Latin America**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN301 **Advanced Grammar and Composition I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in SPAN207.

Practice of complex grammatical structures through reading and writing of compositions and essays. Specific lexical, syntactic, rhetorical, and stylistic devices will be highlighted.

0101	Ana Acedo Garcia MWF 10:00am - 10:50am	Seats (Total: 20) JMZ 1226
0201	Ana Acedo Garcia MWF 11:00am - 11:50am	Seats (Total: 20) JMZ 0125
0301	Ana Acedo Garcia MWF 12:00pm - 12:50pm	Seats (Total: 20) JMZ 2120
0401	Jose Magro MWF 1:00pm - 1:50pm	Seats (Total: 20) JMZ 0125
0501	Douglas Glynn TuTh 9:30am - 10:45am	Seats (Total: 20) JMZ 2117
0601	Sarah Dowman TuTh 11:00am - 12:15pm	Seats (Total: 20) JMZ 1215
0701	Sarah Dowman TuTh 12:30pm - 1:45pm	Seats (Total: 20) JMZ 1215

SPAN302 **Advanced Grammar and Composition II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN301.

Practice in and writing of different types of compositions and essays, including narrations, descriptions, and persuasive writing. Review of problematic syntactical structures.

Contact department for information to register for this course.

SPAN303 **Approaches to Cultural Materials in the Hispanic World**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Prerequisite: SPAN301. Recommended: May elect to take SPAN311 and/or SPAN316 in same semester as SPAN303.

Development of proficiency in critical thought through the reading, viewing, and analytical discussion of major genres and styles of cultural materials selected from Spanish-speaking world. Taught in Spanish.

0101	Chris Lewis MWF 10:00am - 10:50am	Seats (Total: 20) JMZ 0103
0201	Ana Rodriguez MWF 11:00am - 11:50am	Seats (Total: 20) JMZ 3205
0301	Chris Lewis MWF 12:00pm - 12:50pm	Seats (Total: 20) JMZ 0125
0401	Mehl Penrose MW 3:00pm - 4:15pm	Seats (Total: 20) JMZ 2125
0501	Eyda Merediz TuTh 9:30am - 10:45am	Seats (Total: 20) JMZ 2123
0601	Carmen Benito-Vessels TuTh 11:00am - 12:15pm	Seats (Total: 20) JMZ 1117
0701	Jose Naharro-Calderon TuTh 12:30pm - 1:45pm	Seats (Total: 20) JMZ 1120
0801	Saul Sosnowski TuTh 2:00pm - 3:15pm	Seats (Total: 20) JMZ 3120

SPAN306 **Spanish for Heritage Speakers II**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN206.

Practice of complex grammatical structures through reading and writing of compositions and essays. Specific lexical, syntactic, rhetorical and stylistic devices will be highlighted. Designed for Spanish speakers educated in English. Taught in Spanish.

0101	Evelyn Canabal-Torres MWF 11:00am - 11:50am	Seats (Total: 25) JMZ 3120

SPAN307 **Oral Communication Skills for Heritage Speakers of Spanish**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Native or near native knowledge of and no formal education in Spanish.

Development of techniques for formal public speaking in Spanish. Writing and delivering oral presentations for varied audiences and purposes. Includes strategies for organization, the use of rhetorical patterns, and the development of effective discourse. Designed for Heritage speakers of Spanish with native or near native knowledge of Spanish, but no formal education in Spanish. Taught in Spanish.

0101	Carla Onate MWF 2:00pm - 2:50pm	Seats (Total: 25) JMZ 0125

SPAN311 **Advanced Communication I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN301; and must have completed or be concurrently enrolled in SPAN303. Restriction: Must not be a native/fluent speaker of Spanish.

Further development of listening, speaking, and writing skills in Spanish. Opportunity to develop oral and written fluency, improve pronunciation and increase vocabulary. Individual and/or group oral presentations. Taught in Spanish.

0101	Ana Acedo Garcia MWF 1:00pm - 1:50pm	Seats (Total: 20) JMZ 1215
0201	Manel Lacorte TuTh 12:30pm - 1:45pm	Seats (Total: 20) JMZ 2206

0301	Douglas Glynn TuTh 12:30pm - 1:45pm	Seats (Total: 20) JMZ 2122

SPAN316 **Spanish Translation I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN301; and must have completed or be concurrently enrolled in SPAN303.

Translation of texts into Spanish and/or English. Taught in Spanish.

0101	Ginette Eldredge TuTh 12:30pm - 1:45pm	Seats (Total: 20) JMZ 2117
0201	Luis Charry MWF 12:00pm - 12:50pm	Seats (Total: 20) JMZ 1226

SPAN331 **Spanish Culture, Civilization and Literature I: Medieval Times**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

The exploration of cultures of the Iberian Peninsula from its origins until the 15th century as well as the study of historical and political events that gave rise to the Spanish state. Taught in Spanish.

Contact department for information to register for this course.

SPAN332 **Spanish Culture, Civilization and Literature II: Renaissance and Baroque**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

An overview of cultural and literary production of Spain from the late 15th through late 17th centuries, exploring the production of literary texts in their socio-historical, political, religious and cultural contexts and development. Taught in Spanish.

0101	Hernan De Pinillos MWF 11:00am - 11:50am	Seats (Total: 25) JMZ 1224

SPAN333 **Spanish Culture, Civilization and Literature III: Modern Times**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

An overview of cultural and literary production of Spain from the late 17th century through the present day, exploring the production of literary texts in their socio-historical, political, religious and cultural contexts and development. Taught in Spanish.

0101	Jose Naharro-Calderon	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	JMZ 2117

SPAN335 **Cultural History of Seville**

Credits: 4 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN301. Recommended: SPAN303.

Cultural History of Seville: An exploration of the Iberian, Mediterranean, and transatlantic contexts shaping the history, identity, and cultural and artistic expressions of Seville. Includes texts from the Middle Ages to the twenty first century. Focus on the historical, literary and cultural evolution of Seville from the Roman Empire and the Moorish occupation to the discovery and conquest of America until present times. Taught in Spanish.

Contact department for information to register for this course.

SPAN361 **Latin American Literatures and Cultures I: From Pre-Columbian to Colonial Times**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

Overview of cultural history of Latin America from pre-Columbian civilizations to the Colonial period, exploring the foundations of the Spanish American cultural and literary tradition to approximately 1770. Taught in Spanish.

Contact department for information to register for this course.

SPAN362 **Latin American Literatures and Cultures II: From Independence to Nation Formation**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

An overview of cultural and literary production of Latin America from the 18th Century to approximately 1900, exploring the production of literary texts in their socio-historical, political, and cultural contexts and development. Taught in Spanish.

0101	Nidia Reyes MWF 11:00am - 11:50am	Seats (Total: 25) ASY 3221
0201	Laura Demaria TuTh 2:00pm - 3:15pm	Seats (Total: 25) JMZ 1122

SPAN363 **Latin American Literatures and Cultures III: From Modernism to Neo-Liberalism**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHU, DVUP

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

An overview of cultural and literary production of Latin America from the late 19th through the early 21st centuries, exploring the production of literary texts in their socio-historical, political, and cultural contexts and development. Taught in Spanish.

0101	Juan Carlos Quintero-Herencia MWF 1:00pm - 1:50pm	Seats (Total: 25) JMZ 2206
0201	Saul Sosnowski TuTh 11:00am - 12:15pm	Seats (Total: 25) JMZ 3120

SPAN369A **Special Topics in Study Abroad III; Advanced Oral Communication in Spanish**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369B **Special Topics in Study Abroad III; Advanced Academic Writing in Spanish**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369F **Special Topics in Study Abroad III; Spanish Oral Skills through Theatre**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369G **Special Topics in Study Abroad III; Spanish for the Health Professional**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369I **Special Topics in Study Abroad III; Advanced Studies in Spanish**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369J **Special Topics in Study Abroad III; Advanced Spanish Expression and Grammar**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369M **Special Topics in Study Abroad III; Spanish Language B2**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369O **Special Topics in Study Abroad III; Spanish Conversation and Oral Skills**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369Q **Special Topics in Study Abroad III; Spanish Phonetics and Phonology**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369R **Special Topics in Study Abroad III; Advanced Reading Skills in Spanish**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369T **Special Topics in Study Abroad III; Angloamerican Travelers in Spain**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369V **Special Topics in Study Abroad III; Advanced Present-Day Spanish Usage**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369W **Special Topics in Study Abroad III; Spanish Stylistics: Advanced Spanish Writing and Stylistics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369Y **Special Topics in Study Abroad III; B2 Advanced Level Spanish 1**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN369Z **Special Topics in Study Abroad III; B2 Advanced Level Spanish 2**

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN370 **Spanish for Business I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN303; and (SPAN311 or SPAN316). Credit only granted for: SPAN315 or SPAN370. Formerly: SPAN315.

Business Spanish terminology, vocabulary and practices. Emphasis on everyday spoken and written Spanish. Readings and discussions of Spanish commercial topics. May include exposure to Spanish commercial topics. May include exposure to Spanish business environments. Taught in Spanish.

0101	Lisa Carney	Seats (Total: 25)
	MWF 10:00am - 10:50am	JMZ 2117

SPAN371 **Spanish for the Health Professions**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SPAN303; and (SPAN311 or SPAN316). Credit only granted for: SPAN371 or SPAN389A. Formerly: SPAN389A.

Exploration of cultural and linguistic skills for the health professions including vocabulary, listening, speaking, reading and strategies. No experience in the professional area necessary. Taught in Spanish.

0101	Evelyn Canabal-Torres	Seats (Total: 25)
	MWF 12:00pm - 12:50pm	JMZ 2206

SPAN373 **Spanish in the Media**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN303; and (SPAN311 or SPAN316). Or permission of instructor. Credit only granted for: SPAN373 or SPAN359A. Formerly: SPAN359A.

Exploration of Spanish in current events in the Hispanic world in local and international press and varied media, and production of journalistic articles.

0101	Chila Hidalgo	Seats (Total: 20)
	MWF 11:00am - 11:50am	JMZ 1117

SPAN386 **Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Prerequisite: Permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

SPAN399 **Independent Study in Spanish**

(Perm req)

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Specific readings in literature or a translation project under the supervision of a faculty member of the department.

Prerequisite: permission of department.

Contact department for information to register for this course.

SPAN401 **Advanced Composition I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN302; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Compositions and essays with emphasis on stylistics, idiomatic and syntactic structures. Organization and writing of research papers.

Contact department for information to register for this course.

SPAN402 **Advanced Composition II**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN401; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Compositions and essays with emphasis on stylistics, idiomatic and syntactic structures. Organization and writing of research papers.

Contact department for information to register for this course.

SPAN408G **Special Topics in Iberian and Latin American Studies; Mexican Women Writers**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

By providing them the opportunity to engage with a variety of different types of texts written by women in Mexico from the colonial period to the present, this course will help students understand better the related topics of power, gender, and literature. The poetry of Sor Juana, the essays of Rosario Castellanos, the theater of Sabina Berman, and the prose fiction of Guadalupe Nettel; these are just a few examples of texts students will read, analyze, interpret, and consider in social and historical context. Topics addressed in conjunction with the study of these and other texts include: social structures that impede and allow women to write and publish; the visibility and invisibility of women writers in literary histories; critical reception of women writers; the relation of literary expression to feminist movements in Mexico; debates around the category of womens writing; and the possibilities and challenges presented by describing shared or distinctive themes and formal characteristics in texts written by women.

0101	Ryan Long	Seats (Total: 25)
	TuTh 9:30am - 10:45am	JMZ 3120

SPAN408I **Special Topics in Iberian and Latin American Studies; The Bright Middle Ages**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

Students will study the impact of the Spanish Early Modern literature, cartography and architecture in the US Atlantic Coast (Labrador Peninsula to Florida). The class will depart with readings that will provide a general overview of the Spanish presence in the US and its role in the early history of this country. We will continue reading about the voyages of exploration to the US East Coast of 1521-1526, which were sponsored by two Spaniards, Lucas Vazquez de Ayllon and Pedro Menendez de Aviles; these voyages subsequently resulted in a territory named "Tierras de Ayllon" (from present Florida to the Chesapeake Bay). The Lands of Ayllon and the Missions of Ajacan and San Miguel de Gualdape were located on the Chicora, Atlantic coast of today's US. We will focus on the history and the geographical location of these Spanish establishments; they paralleled geographically and anteceded chronologically to those of the British colony at Roanoke (1585) and the eventual establishment of Jamestown (1607).

0101	Carmen Benito-Vessels	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	JMZ 2207

SPAN408J **Special Topics in Iberian and Latin American Studies; Contemporary Mexican Literature**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

Contact department for information to register for this course.

SPAN408L **Special Topics in Iberian and Latin American Studies; Northern Triangle: El Salvador, Honduras and Guatemala**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

This course explores the discursive construction of the so called "Northern Triangle" of Central America, encompassing primarily El Salvador, Honduras, and Guatemala and extending into the rest of the isthmus. We will ask how and why this region has been historically represented as a site of violence, insecurity, despair, and emigration, especially in light of hemispheric economic policies. We will discuss issues of violence, crime, feminicide, impunity, corruption, and human and drug trafficking as well as the struggles for equality, human rights, environmental justice, food security, and access to healthcare, education, and employment in the region. Our texts will include novels, short stories, cronica negra, films, photography, and other interdisciplinary resources. Students should expect to participate in a community engagement project. Taught in Spanish.

0101	Ana Rodriguez	Seats (Total: 25)
	MW 2:00pm - 3:15pm	JMZ 2206

SPAN408N **Special Topics in Iberian and Latin American Studies; Love, Science, Religion and the Pursuit of Criollo Independeence in 18th-Century Mexico**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

Contact department for information to register for this course.

SPAN408Y **Special Topics in Iberian and Latin American Studies; Contemporary Spanish Short Story**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

Contact department for information to register for this course.

SPAN408Z **Special Topics in Iberian and Latin American Studies; 20th Century Contemporary Latin American Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409F **Great Themes of the Hispanic Literatures; Literary Myths and Philosophy in the European Tradition**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409M **Great Themes of the Hispanic Literatures; Contemporary Spain through Spanish Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409N **Great Themes of the Hispanic Literatures; 20th Century Spanish History and Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409O **Great Themes of the Hispanic Literatures; Images of Spain in Contemporary Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409W **Great Themes of the Hispanic Literatures; Women Writers of Spain**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409Y **Great Themes of the Hispanic Literatures; Filmmaking in Spain**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409Z **Great Themes of the Hispanic Literatures; Spanish Film and Theatre**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN418C **Hispanic Literature in Translation; The Classical Tradition in Spain and Latin America**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Also offered as CLAS419B and LASC448O. Credit granted for SPAN418C, CLAS419B or LASC448O. A survey of the reception of Classical literature in the Spanish-speaking world, with a particular focus on ancient drama. We read select literary works in translation, ranging from Renaissance Spain to contemporary Latin America, side-by-side with their classical models, to examine what is culturally unique about their choice of authors, themes, and adaptation of the material. Students have the option of reading some works in the original

0101	Francisco Barrenechea	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	SQH 1105

SPAN422 **Intercultural Communication and Negotiation**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVCC

Prerequisite: SPAN370 OR SPAN371 OR SPAN373 OR SPAN 374. Restriction: Junior standing or higher.

Focuses on the relationship of language and culture of those operating in world markets. Particular attention will be given to intercultural communication, linguistic systems, culture specific perceptions of, and negotiation with, the Spanish-speaking world. Taught in Spanish.

0101	Elisa Gironzetti	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	JMZ 0118

SPAN425 **Hispanic Linguistics II: Structures of Spanish**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN303; and SPAN311 or SPAN316 or SPAN325.

This course begins with an introduction to general concepts in linguistics, from language function and the brain to communication, culture, and thought, and their relation to other disciplines in the social sciences. The main purpose of this course is to provide an overview of Hispanic linguistics through multiple perspectives, while exploring the areas of Spanish morphology, syntax, and semantics. This course will also focus on the structural tendencies of Spanish through a variety of practical activities. Taught in Spanish.

Contact department for information to register for this course.

SPAN426 **Hispanic Linguistics III: Language in Use**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN303; and SPAN311 or SPAN316 or SPAN325. Also offered as: SPAN626. Credit only granted for: SPAN426 or SPAN626.

Designed for students without previous experience in Linguistics. Focus on language variation and use, linguistic change, and bilingualism. Taught in Spanish.

0101	Manel Lacorte	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	JMZ 2206

SPAN430 **Cervantes: Don Quijote**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN333, SPAN361, SPAN331, SPAN332, SPAN362, or SPAN363.

Contact department for information to register for this course.

SPAN449A **Special Topics in Spanish Civilization; Spanish Civilization**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive study of a selected topic related to Spanish civilization.

Contact department for information to register for this course.

SPAN449C **Special Topics in Spanish Civilization; History of Spain II: 20th Century**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive study of a selected topic related to Spanish civilization.

Contact department for information to register for this course.

SPAN449J **Special Topics in Spanish Civilization; Mosaic: Jews, Muslims and the Spanish Experience**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive study of a selected topic related to Spanish civilization.

Contact department for information to register for this course.

SPAN449M **Special Topics in Spanish Civilization; Barcelona and Madrid: Contemporary Film and Theatre**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive study of a selected topic related to Spanish civilization.

Contact department for information to register for this course.

SPAN449Q **Special Topics in Spanish Civilization; 20th Century History of Spain and the Basque Country**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive study of a selected topic related to Spanish civilization.

Contact department for information to register for this course.

SPAN449Z **Special Topics in Spanish Civilization; Literature and Cinema in the Contemporary City**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An intensive study of a selected topic related to Spanish civilization.

Contact department for information to register for this course.

SPAN462 **Twentieth Century Drama**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN333, SPAN361, SPAN331, SPAN332, SPAN362, or SPAN363.

Significant plays of the twentieth century.

Contact department for information to register for this course.

SPAN464 **Contemporary Spanish Poetry**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN333, SPAN361, SPAN331, SPAN332, SPAN362, or SPAN363.

Spanish poetry from the generation of 1927 to the present.

Contact department for information to register for this course.

SPAN466 **The Contemporary Spanish Novel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SPAN333, SPAN361, SPAN331, SPAN332, SPAN362, or SPAN363.

The novel and the short story from 1940 to the present.

Contact department for information to register for this course.

SPAN469A **Study Abroad Special Topics IV; Advanced Topics in Spanish Language**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN469C **Study Abroad Special Topics IV; Composition**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

SPAN470 **Spanish for Business II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed SPAN370. Restriction: Sophomore standing or higher. Credit only granted for: SPAN415 or SPAN470. Formerly: SPAN415.

Business Spanish terminology, vocabulary and practices. Emphasis on everyday spoken and written Spanish. Readings and discussions of international topics. Cross-cultural considerations relative to international business operations, including exporting and banking. Taught in Spanish.

0201	Roberta Lavine	Seats (Total: 25)
	MWF 11:00am - 11:50am	JMZ 2206

SPAN479 **Honors Thesis**

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail, Audit

Researching and writing an honors thesis under the direction of a professor.

Contact department for information to register for this course.

SPAN495 **Honors Reading**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must be in Spanish and Portuguese Honors; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Supervised reading.

Contact department for information to register for this course.

SPAN626 **Hispanic Linguistics II: Language in Use**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SPAN301; or permission of ARHU-School of Languages, Literatures, and Cultures department. Also offered as: SPAN426. Credit only granted for: SPAN426 or SPAN626.

This course will focus on issues related to language variation and use with a more in-depth analysis of the semantics, pragmatics, and sociolinguistics of Spanish. Students will be introduced to current research in the fields of dialectology, bilingualism and language policy, and the social aspects of language change. This course will include an analysis of current research as it relates to the field of linguistics and other social sciences.

0101	Manel Lacorte TuTh 3:30pm - 4:45pm	Seats (Total: 5) JMZ 2206

SPAN699 **Independent Study in Spanish**

Credits: 1-3 Grading Method: Regular, Audit

This course is designed to provide graduate students an opportunity to pursue independent study under the supervision of a member of the department.

Contact department for information to register for this course.

SPAN798D **Open Seminar; Cervantes and Don Quixote**

Credits: 3 Grading Method: Regular, Audit

0101	Hernan De Pinillos M 5:00pm - 7:30pm	Seats (Total: 10) JMZ 3122

SPAN798E **Open Seminar; Writing the Present: Reflections on Our Times**

Credits: 3 Grading Method: Regular, Audit

What the present is or what our present is are the two questions this class will not address. More than an ontological view of the present, this course explores the fluidity of a time that is extremely difficult to grasp. Thus, the present time we purposely seek to reflect upon is a cultural topography in constant change. In other words, our goal will be to revise contemporary cultural artifacts and theoretical debates to propose a reading machine to help us understand our own critical place.

0101	Laura Demaria Tu 5:00pm - 7:30pm	Seats (Total: 10) JMZ 3118

SPAN798F **Open Seminar; Theory-Politics-Literature: A Caribbean Seascape**

Credits: 3 Grading Method: Regular, Audit

In this open graduate seminar we would discuss the elements of the triptych that informs our title. We would plunge the title into an image -the Caribbean Sea- as a way of de-authorizing or marinating any linear causalities between the elements of the triptych. We would not revamp the predictable dichotomies that mobilizes current university discourse on any of the elements of our title. It is our desire to de-frame, and de-stabilize the hegemonic modes of thought that link and separate the elements of our triptych. It is not our purpose to apply any identity template to a Caribbean corpus, nor to collect them. We aspire to abandon any disciplinary narrative of subordinations, verifications, or dispose of the how-to-make-a-paper blueprints ubiquitous in academic venues. This course will become an exploration on the rigors and pleasures of thought facing the sea. The course will be conducted in Spanish, but students' papers, comments, and presentations can be written, either, in English or Spanish.

0101	Juan Carlos Quintero-Herencia	Seats (Total: 10)
	W 5:00pm - 7:30pm	JMZ 3122

SPAN799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

SPAN898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

SPAN899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

SPHL Public Health Spring 2019

SPHL100 **Foundations of Public Health**

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in SPHL-School of Public Health. Credit only granted for: SPHL100, PHSC300 or SPHL600.

An overview of the goals, functions, and methods of public health. After an introduction to the core concepts and tools used in public health research and practice, applications of these methodologies are considered in the context of current controversies/problems in public health. Students work together to develop strategies for prevention and control that take into consideration different points of view, outside research, and impacts on individuals and communities.

0101	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 8:00am - 8:50am	Seats (Total: 20) ESJ 0224 SPH 0307	Discussion
0102	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 9:00am - 9:50am	Seats (Total: 20) ESJ 0224 SPH 0307	Discussion
0103	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 20) ESJ 0224 SPH 0307	Discussion
0104	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 20) ESJ 0224 SPH 0307	Discussion
0105	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 20) ESJ 0224 SPH 0307	Discussion
0106	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 20) ESJ 0224 SPH 0307	Discussion
0107	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 2:00pm - 2:50pm	Seats (Total: 20) ESJ 0224 SPH 0307	Discussion
0108	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 3:00pm - 3:50pm	Seats (Total: 20) ESJ 0224 SPH 0307	Discussion
0109	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 4:00pm - 4:50pm	Seats (Total: 20) ESJ 0224 SPH 0307	Discussion
0110	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 5:00pm - 5:50pm	Seats (Total: 1) ESJ 0224 SPH 0307	Discussion

0111	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 20) ESJ 0224 ATL 2428	Discussion
0201	Sylvette La Touche-Howard MW 3:00pm - 3:50pm F 8:00am - 8:50am	Seats (Total: 20) ESJ 0202 SPH 0301	Discussion
0202	Sylvette La Touche-Howard MW 3:00pm - 3:50pm F 9:00am - 9:50am	Seats (Total: 20) ESJ 0202 SPH 0301	Discussion
0203	Sylvette La Touche-Howard MW 3:00pm - 3:50pm F 10:00am - 10:50am	Seats (Total: 20) ESJ 0202 SPH 0308	Discussion
0204	Sylvette La Touche-Howard MW 3:00pm - 3:50pm F 11:00am - 11:50am	Seats (Total: 20) ESJ 0202 SPH 0308	Discussion
0205	Sylvette La Touche-Howard MW 3:00pm - 3:50pm F 12:00pm - 12:50pm	Seats (Total: 20) ESJ 0202 SPH 0308	Discussion
0206	Sylvette La Touche-Howard MW 3:00pm - 3:50pm F 1:00pm - 1:50pm	Seats (Total: 20) ESJ 0202 SPH 0308	Discussion
0207	Sylvette La Touche-Howard MW 3:00pm - 3:50pm F 2:00pm - 2:50pm	Seats (Total: 20) ESJ 0202 SPH 0308	Discussion
0208	Sylvette La Touche-Howard MW 3:00pm - 3:50pm F 3:00pm - 3:50pm	Seats (Total: 20) ESJ 0202 SPH 0308	Discussion
0209	Sylvette La Touche-Howard MW 3:00pm - 3:50pm F 4:00pm - 4:50pm	Seats (Total: 20) ESJ 0202 SPH 0308	Discussion

0211	Sylvette La Touche-Howard	Seats (Total: 20)	
	MW 3:00pm - 3:50pm	ESJ 0202	
	F 10:00am - 10:50am	ATL 2428	Discussion

SPHL240 **Public Health Engagement**

Credits: 2 Grading Method: Regular

Restriction: Must be a transfer student with 60 credits or less; and must be in a major in SPHL-School of Public Health. Additional information: The course will include a significant physical activity component.

Public Health Engagement is a transfer transition course that provides an opportunity for transfer students to engage in the professional culture of the public health field and to build community while navigating a large, public institution. Instructors use research, physical activity, and academic engagement to stimulate community building across all majors within the School of Public Health. Students will engage with public health issues, academic resources, solution-driven grant writing, identity development, faculty and alumni support systems, and group and individual physical activities. A partnership of 3 sectors within the school, this course is taught by an interdisciplinary team fostering public health practice and community building while promoting successful transition, integration and retention.

0101	Lindsey Winter, Amy Lintner	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	ATL 2316	

SPHL600 **Foundations of Public Health**

Credits: 3 Grading Method: Regular

Restriction: Must be a graduate student within the School of Public Health. Credit only granted for: SPHL100, PHSC300 or SPHL600.

An overview of the goals, functions, and methods of public health. After an introduction to the core concepts and tools used in public health research and practice, applications of these methodologies are considered in the context of current controversies/problems in public health. Students work together to develop strategies for prevention and control that taken into consideration different points of view, outside research, and impacts on individuals and communities.

0101	Sylvette La Touche-Howard, Zahra Saboori	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Th 3:00pm - 4:00pm	SPH 0307	Discussion

SPHL610 **Program and Policy Planning, Implementation, and Evaluation**

Credits: 5

Grading Method: Regular, Audit

Recommended: Completion of SPHL 601, 602, and 603 with a grade of B- or better in each. Note that completion of SPHL 601, 602, and 603 with a B- or better is a graduation requirement for the MPH/MHA degrees; and concurrent enrollment in SPHL 611. Restriction: Must be in a graduate student in SPHL-School of Public Health.

This second course in the MPH/MHA integrated core sequence will prepare students to engage in the important tasks of assessing population and patient needs, implementing and evaluating culturally appropriate public health programs, policies, and interventions, and pursuing appropriate resources to support activities through the policy process and via effective use of power in the face of competing interests. The course will be a mix of individual and team-based assignments based upon an existing or newly identified problem, in addition to case studies, interactive simulations, and applied writing assignments.

0101	Lori Simon-Rusinowitz, Sacoby Wilson, James Butler MW 4:15pm - 6:15pm W 6:30pm - 7:30pm	Seats (Total: 20) SPH 1312 SPH 0302	 Discussion
0102	James Butler, Lori Simon-Rusinowitz, Sacoby Wilson MW 4:15pm - 6:15pm W 7:30pm - 8:30pm	Seats (Total: 20) SPH 1312 SPH 0302	 Discussion
0103	James Butler, Lori Simon-Rusinowitz, Sacoby Wilson MW 4:15pm - 6:15pm W 6:30pm - 7:30pm	Seats (Total: 20) SPH 1312 SPH 0308	 Discussion
0104	James Butler, Lori Simon-Rusinowitz, Sacoby Wilson MW 4:15pm - 6:15pm W 7:30pm - 8:30pm	Seats (Total: 20) SPH 1312 SPH 0308	 Discussion
PLH1	Priscilla Novak, Steven Ault Class time/details on ELMs *Restricted to students in the Master of Public Health Practice and Policy and Graduate Certificate in Principles of Public Health programs.*	Seats (Total: 32) ONLINE	

SPHL611 Public Health Ethics

Credits: 1

Grading Method: Regular, Audit

Prerequisite: Must have completed SPHL601; or permission of instructor. Restriction: Must be a graduate student in the School of Public Health. Credit only granted for: EPIB641, KNES689Y, or SPHL611.. Formerly: EPIB641, KNES689Y.

Overview and discussion of ethical issues that face public health practitioners.

0101	Craig Fryer **Meets January 28, 2019 - March 15, 2019** M 6:30pm - 8:30pm	Seats (Total: 35) SPH 1301
0201	Craig Fryer **Meets March 18, 2019 - May 14, 2019** M 6:30pm - 8:30pm	Seats (Total: 35) SPH 1301
PLH1	Evelyn King-Marshall **Meets January 28, 2019 - March 15, 2019** Class time/details on ELMs *Restricted to students in the Master of Public Health Practice and Policy and Graduate Certificate in Principles of Public Health programs.*	Seats (Total: 32) ONLINE

SPHL612 **Research Ethics**

Credits: 1 Grading Method: Regular, Audit

Restriction: Must be a graduate student in the School of Public Health. Credit only granted for: EPIB641, KNES689Y or SPHL612. Formerly: EPIB641, KNES689Y.

Overview and discussion of ethical issues that face public health researchers.

0101	Stephen Roth **Meets January 28, 2019 - March 15, 2019** F 11:00am - 12:50pm	Seats (Total: 36) SPH 1302

STAT Statistics and Probability Spring 2019

STAT100 **Elementary Statistics and Probability**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: MS General Education: FSAR, FSMA

Prerequisite: MATH110, MATH112, MATH113, or MATH115; or permission of CMNS-Mathematics department; or must have math eligibility of STAT100 or higher and math eligibility is based on the Math Placement Exam or the successful completion of Math 003 with appropriate eligibility. Restriction: Must not have completed MATH111; or must not have completed any MATH or STAT course with a prerequisite of MATH141. Credit only granted for: STAT100, MATH107 or MATH111.

Simplest tests of statistical hypotheses; applications to before-and-after and matched pair studies. Events, probability, combinations, independence. Binomial probabilities, confidence limits. Random variables, expected values, median, variance. Tests based on ranks. Law of large numbers, normal approximation. Estimates of mean and variance.

0111	Matthew Griffin MWF 12:00pm - 12:50pm MWF 8:00am - 8:50am	Seats (Total: 31) ESJ 0202 PHY 4206	Discussion
0112	Matthew Griffin MWF 12:00pm - 12:50pm MWF 9:00am - 9:50am	Seats (Total: 31) ESJ 0202 PHY 4206	Discussion
0121	Matthew Griffin MWF 12:00pm - 12:50pm MWF 10:00am - 10:50am	Seats (Total: 31) ESJ 0202 PHY 4206	Discussion
0122	Matthew Griffin MWF 12:00pm - 12:50pm MWF 11:00am - 11:50am	Seats (Total: 31) ESJ 0202 PHY 4206	Discussion
0131	Matthew Griffin MWF 12:00pm - 12:50pm MWF 1:00pm - 1:50pm	Seats (Total: 31) ESJ 0202 PHY 4206	Discussion
0132	Matthew Griffin MWF 12:00pm - 12:50pm MWF 2:00pm - 2:50pm	Seats (Total: 31) ESJ 0202 PHY 4206	Discussion
0141	Matthew Griffin MWF 12:00pm - 12:50pm TuTh 9:30am - 10:45am	Seats (Total: 31) ESJ 0202 PHY 4206	Discussion
0142	Matthew Griffin MWF 12:00pm - 12:50pm TuTh 9:30am - 10:45am	Seats (Total: 31) ESJ 0202 PHY 4206	Discussion

0143	Matthew Griffin MWF 12:00pm - 12:50pm TuTh 11:00am - 12:15pm	Seats (Total: 31) ESJ 0202 PHY 4206	Discussion
0144	Matthew Griffin MWF 12:00pm - 12:50pm TuTh 11:00am - 12:15pm	Seats (Total: 31) ESJ 0202 PHY 4206	Discussion
0211	Archana Khurana MWF 1:00pm - 1:50pm MWF 8:00am - 8:50am	Seats (Total: 30) ESJ 0202 PHY 4206	Discussion
0212	Archana Khurana MWF 1:00pm - 1:50pm MWF 9:00am - 9:50am	Seats (Total: 31) ESJ 0202 PHY 4206	Discussion
0221	Archana Khurana MWF 1:00pm - 1:50pm MWF 10:00am - 10:50am	Seats (Total: 31) ESJ 0202 PHY 4206	Discussion
0222	Archana Khurana MWF 1:00pm - 1:50pm MWF 11:00am - 11:50am	Seats (Total: 30) ESJ 0202 PHY 4206	Discussion
0231	Archana Khurana MWF 1:00pm - 1:50pm MWF 12:00pm - 12:50pm	Seats (Total: 31) ESJ 0202 PHY 4206	Discussion
0232	Archana Khurana MWF 1:00pm - 1:50pm MWF 2:00pm - 2:50pm	Seats (Total: 30) ESJ 0202 PHY 4206	Discussion
0241	Archana Khurana MWF 1:00pm - 1:50pm TuTh 9:30am - 10:45am	Seats (Total: 30) ESJ 0202 PHY 4220	Discussion
0242	Archana Khurana MWF 1:00pm - 1:50pm TuTh 11:00am - 12:15pm	Seats (Total: 28) ESJ 0202 PHY 4220	Discussion

STAT386 Experiential Learning

(Perm req)

Credits: 3-6

Grading Method: Regular, Pass-Fail

Prerequisite: Must have learning proposal approved by the CMNS-Mathematics Department.

2801	Abram Kagan Contact instructor or department for details.	Seats (Total: 10)	
5001	Paul Smith Contact instructor or department for details.	Seats (Total: 10)	

STAT400 **Applied Probability and Statistics I**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH131, MATH141); or students who have taken courses with comparable content may contact the department. Credit only granted for: BMGT231, ENEE324, or STAT400. Additional information: Not acceptable toward graduate degrees in MATH/STAT/AMSC.

Random variables, standard distributions, moments, law of large numbers and central limit theorem. Sampling methods, estimation of parameters, testing of hypotheses.

0111	Susan Mazzullo MWF 10:00am - 10:50am Tu 8:00am - 8:50am	Seats (Total: 28) ARM 0135 MTH 0106		Discussion
0112	Susan Mazzullo MWF 10:00am - 10:50am Tu 8:00am - 8:50am	Seats (Total: 28) ARM 0135 MTH 0402		Discussion
0121	Susan Mazzullo MWF 10:00am - 10:50am Tu 9:00am - 9:50am	Seats (Total: 28) ARM 0135 MTH 0106		Discussion
0122	Susan Mazzullo MWF 10:00am - 10:50am Tu 9:00am - 9:50am	Seats (Total: 28) ARM 0135 MTH 0402		Discussion
0123	Susan Mazzullo MWF 10:00am - 10:50am Tu 9:00am - 9:50am	Seats (Total: 28) ARM 0135 MTH 0307		Discussion

0131	Susan Mazzullo MWF 10:00am - 10:50am Tu 10:00am - 10:50am	Seats (Total: 28) ARM 0135 MTH 0106	Discussion
0132	Susan Mazzullo MWF 10:00am - 10:50am Tu 10:00am - 10:50am	Seats (Total: 28) ARM 0135 MTH 0307	Discussion
0141	Susan Mazzullo MWF 10:00am - 10:50am Tu 12:00pm - 12:50pm	Seats (Total: 28) ARM 0135 EGR 3114	Discussion
0142	Susan Mazzullo MWF 10:00am - 10:50am Tu 12:00pm - 12:50pm	Seats (Total: 28) ARM 0135 MTH 0104	Discussion
0211	Casey Cremins MWF 11:00am - 11:50am Th 8:00am - 8:50am	Seats (Total: 28) ARM 0131 MTH 0106	Discussion
0212	Casey Cremins MWF 11:00am - 11:50am Th 8:00am - 8:50am	Seats (Total: 28) ARM 0131 MTH 0402	Discussion
0221	Casey Cremins MWF 11:00am - 11:50am Th 9:00am - 9:50am	Seats (Total: 28) ARM 0131 MTH 0106	Discussion
0222	Casey Cremins MWF 11:00am - 11:50am Th 9:00am - 9:50am	Seats (Total: 28) ARM 0131 MTH 0402	Discussion
0223	Casey Cremins MWF 11:00am - 11:50am Th 9:00am - 9:50am	Seats (Total: 28) ARM 0131 MTH 0307	Discussion
0231	Casey Cremins MWF 11:00am - 11:50am Th 10:00am - 10:50am	Seats (Total: 28) ARM 0131 MTH 0106	Discussion

0232	Casey Cremins MWF 11:00am - 11:50am Th 10:00am - 10:50am	Seats (Total: 28) ARM 0131 MTH 0105	Discussion
0241	Casey Cremins MWF 11:00am - 11:50am Th 12:00pm - 12:50pm	Seats (Total: 28) ARM 0131 EGR 3114	Discussion
0242	Casey Cremins MWF 11:00am - 11:50am Th 12:00pm - 12:50pm	Seats (Total: 28) ARM 0131 MTH 0104	Discussion
0311	John Millson TuTh 12:30pm - 1:45pm F 8:00am - 8:50am	Seats (Total: 28) ARM 0126 MTH 0101	Discussion
0312	John Millson TuTh 12:30pm - 1:45pm F 8:00am - 8:50am	Seats (Total: 28) ARM 0126 MTH 0201	Discussion
0321	John Millson TuTh 12:30pm - 1:45pm F 9:00am - 9:50am	Seats (Total: 28) ARM 0126 MTH 0101	Discussion
0322	John Millson TuTh 12:30pm - 1:45pm F 9:00am - 9:50am	Seats (Total: 28) ARM 0126 MTH 0201	Discussion
0323	John Millson TuTh 12:30pm - 1:45pm F 9:00am - 9:50am	Seats (Total: 28) ARM 0126 MTH 0401	Discussion
0331	John Millson TuTh 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 28) ARM 0126 MTH B0427	Discussion
0332	John Millson TuTh 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 28) ARM 0126 MTH 0102	Discussion

0341	John Millson TuTh 12:30pm - 1:45pm F 11:00am - 11:50am	Seats (Total: 28) ARM 0126 MTH B0427	 Discussion
0342	John Millson TuTh 12:30pm - 1:45pm F 11:00am - 11:50am	Seats (Total: 28) ARM 0126 MTH 0102	 Discussion

STAT401 **Applied Probability and Statistics II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (STAT400, STAT410). Additional information: Not acceptable toward graduate degrees in MATH/STAT/AMSC.

Point estimation - unbiased and consistent estimators. Interval estimation. Minimum variance and maximum likelihood estimators. Testing of hypotheses. Regression, correlation and analysis of variance. Sampling distributions. Elements of non-parametric methods.

0101	Hatice Sahinoglu MWF 10:00am - 10:50am	Seats (Total: 25) EGR 3102	
0201	Adam Telatovich MWF 12:00pm - 12:50pm Tu 8:00am - 8:50am	Seats (Total: 25) CHE 2108 MTH 0409	 Discussion
0202	Adam Telatovich MWF 12:00pm - 12:50pm Tu 9:00am - 9:50am	Seats (Total: 25) CHE 2108 MTH 0409	 Discussion
0203	Adam Telatovich MWF 12:00pm - 12:50pm Tu 10:00am - 10:50am	Seats (Total: 25) CHE 2108 MTH 0409	 Discussion
0301	Hatice Sahinoglu MWF 1:00pm - 1:50pm	Seats (Total: 25) MTH 0103	
0401	Takumi Saegusa TuTh 11:00am - 12:15pm	Seats (Total: 30) MTH 0304	
0501	Adam Telatovich TuTh 9:30am - 10:45am	Seats (Total: 30) CHM 0128	

0601	Archana Khurana MWF 11:00am - 11:50am	Seats (Total: 35) MTH B0421

STAT410 **Introduction to Probability Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241). Also offered as: SURV410. Credit only granted for: STAT410 or SURV410.

Probability and its properties. Random variables and distribution functions in one and several dimensions. Moments. Characteristic functions. Limit theorems.

0101	Maria Cameron MWF 10:00am - 10:50am	Seats (Total: 28) MTH 0302
0201	Peter Nandori MWF 12:00pm - 12:50pm	Seats (Total: 32) MTH 0306
0301	Casey Cremins MWF 2:00pm - 2:50pm	Seats (Total: 28) MTH 0305
0401	Sandra Cerrai TuTh 9:30am - 10:45am	Seats (Total: 30) ITV 1100
0501	Abram Kagan TuTh 12:30pm - 1:45pm	Seats (Total: 30) MTH 0106
0601	Vadim Kaloshin TuTh 3:30pm - 4:45pm	Seats (Total: 30) MTH 0201

STAT420 **Theory and Methods of Statistics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (SURV410, STAT410). Also offered as: SURV420. Credit only granted for: STAT420 or SURV420.

Point estimation, sufficiency, completeness, Cramer-Rao inequality, maximum likelihood. Confidence intervals for parameters of normal distribution. Hypothesis testing, most powerful tests, likelihood ratio tests. Chi-square tests, analysis of variance, regression, correlation. Nonparametric methods.

Offered Spring only.

0101	Takumi Saegusa TuTh 2:00pm - 3:15pm	Seats (Total: 28) MTH 0201
0201	Jian Lun Xu TuTh 5:00pm - 6:15pm	Seats (Total: 30) MTH 0304

STAT430 **Introduction to Statistical Computing with SAS**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (STAT400, STAT410).

Descriptive and inferential statistics. SAS software: numerical and graphical data summaries; merging, sorting and splitting data sets. Least squares, regression, graphics and informal diagnostics, interpreting results. Categorical data, lifetime data, time series. Applications to engineering, life science, business and social science.

0101	Emily Francis MWF 10:00am - 10:50am	Seats (Total: 45) MTH B0421
0201	Hatice Sahinoglu MWF 11:00am - 11:50am	Seats (Total: 33) CHM 1224
0301	Timothy Pilachowski MWF 1:00pm - 1:50pm	Seats (Total: 36) CHM 0128
0501	Christine Nickel TuTh 5:00pm - 6:15pm	Seats (Total: 40) MTH B0421

STAT440 **Sampling Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (STAT401, STAT420). Credit only granted for: STAT440 or SURV440.

Simple random sampling. Sampling for proportions. Estimation of sample size. Sampling with varying probabilities. Sampling: stratified, systematic, cluster, double, sequential, incomplete.

0101	Natalia Tchetcherina MWF 10:00am - 10:50am	Seats (Total: 25) ITV 1100
0201	Natalia Tchetcherina MWF 11:00am - 11:50am	Seats (Total: 25) ITV 1100

STAT464 **Introduction to Biostatistics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed one semester of calculus. Restriction: Junior standing or higher. Credit only granted for: BIOE372 or STAT464. Additional information: Not acceptable toward degrees in MATH/STAT.

Probabilistic models. Sampling. Some applications of probability in genetics. Experimental designs. Estimation of effects of treatments. Comparative experiments. Fisher-Irwin test. Wilcoxon tests for paired comparisons.

0101	Raluca Rosca MWF 11:00am - 11:50am	Seats (Total: 25) MTH 1308
0201	Raluca Rosca MWF 3:00pm - 3:50pm	Seats (Total: 25) CHE 2118

STAT470 **Actuarial Mathematics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241). Recommended: STAT400.

Major mathematical ideas involved in calculation of life insurance premiums, including compound interest and present valuation of future income streams; probability distribution and expected values derived from life tables; the interpolation of probability distributions from values estimated at one-year multiples; the 'Law of Large Numbers' describing the regular probabilistic behavior of large populations of independent individuals; and the detailed calculation of expected present values arising in insurance problems.

0101	Matthew Griffin MWF 2:00pm - 2:50pm	Seats (Total: 30) ITV 1100
0201	Matthew Griffin MWF 3:00pm - 3:50pm	Seats (Total: 30) ITV 1100

STAT498 **Selected Topics in Statistics**

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduate students will be offered occasionally under the general guidance of the MATH/STAT major committee. Students register for reading in statistics under this number.

6570	Peter Nandori	Seats (Total: 10)
	Contact instructor or department for details.	

STAT498A **Selected Topics in Statistics**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Topics of special interest to advanced undergraduate students will be offered occasionally under the general guidance of the MATH/STAT major committee. Students register for reading in statistics under this number.

Contact department for information to register for this course.

STAT601 **Probability Theory II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: STAT600.

Weak convergence of measures; characteristic functions; Central Limit Theorem and local limit theorem; stable laws; Kolmogorov consistency theorem (without proof); conditional expectations and martingales; optimal stopping theorem; convergence of martingales; Brownian motion; Markov processes and families; stochastic integral and Ito formula.

Offered Spring only.

0101	Leonid Koralov	Seats (Total: 25)
	MWF 1:00pm - 1:50pm	MTH 0102

STAT650 **Applied Stochastic Processes**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: STAT410; or students who have taken courses with comparable content may contact the department.

Basic concepts of stochastic processes. Markov processes (discrete and continuous parameters), Random walks, Poisson processes, Birth and death processes. Renewal processes and basic limit theorems. Discrete time martingales, stopping times, optional sampling theorem. Applications from theories of stochastic epidemics, survival analysis and others.

0101	Mark Freidlin	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	MTH 0104

STAT689 **Research Interactions in Statistics**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

The students participate in a vertically integrated (undergraduate, graduate and/or postdoctoral, faculty) research group. Format varies, but includes regular meetings, readings and presentations of material. See graduate program's online syllabus or contact the graduate program director for more information.

Contact department for information to register for this course.

STAT701 **Mathematical Statistics II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: STAT700; or students who have taken courses with comparable content may contact the department.

Testing hypotheses: parametric methods. Neyman-Pearson lemma. Uniformly most powerful tests. Unbiased tests. Locally optimal tests. Large sample theory, asymptotically best procedures. Nonparametric methods, Wilcoxon, Fisher-Yates, median tests. Linear models, analysis of variance, regression and correlation. Sequential analysis.

Offered Spring only.

0101	Joan Ren	Seats (Total: 21)
	TuTh 12:30pm - 1:45pm	MTH 1308

STAT741 **Linear Statistical Models II**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: STAT740.

Continuation of STAT 740. Multiway layouts, incomplete designs, Latin squares, complete and fractional factorial designs, crossed and nested models. Balanced random effects models, mixed models, repeated measures.General mixed model, computational algorithms, ML and REML estimates. Generalized linear models, logistic and loglinear regression.

Offered Spring only.

0101	Paul Smith	Seats (Total: 20)
	MWF 2:00pm - 2:50pm	MTH 0103

STAT750 **Multivariate Analysis**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: STAT700 or STAT420.

Multivariate normal, Wishart's and Hotelling's distributions. Tests of hypotheses, estimation. Generalized distance, discriminant analysis. Regression and correlation. Multivariate analysis of variance; distribution of test criteria. Principal components, canonical correlations and factor analysis.

0101	Benjamin Kedem	Seats (Total: 20)
	MWF 10:00am - 10:50am	MTH 1308

STAT799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

STAT808A **Selected Topics in Probability**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

STAT818A **Selected Topics in Statistics**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

STAT818M **Selected Topics in Statistics; Missing Data**

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

0101	Eric Slud	Seats (Total: 20)
	MW 5:00pm - 6:15pm	MTH 0102

STAT898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

STAT899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

SURV Survey Methodology Spring 2019

SURV400 **Fundamentals of Survey and Data Science**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: STAT100; or permission of BSOS-Joint Program in Survey Methodology department. Restriction: Course open to SURV certificate students, SURV Advanced Special Students, and SURV undergraduate minors. Graduate students from other departments may enroll with permission from the department. Credit only granted for: SURV699M or SURV400. Formerly: SURV699M.

The course introduces the student to a set of principles of survey and data science that are the basis of standard practices in these fields. The course exposes the student to key terminology and concepts of collecting and analyzing data from surveys and other data sources to gain insights and to test hypotheses about the nature of human and social behavior and interaction. It will also present a framework that will allow the student to evaluate the influence of different error sources on the quality of data.

SVW1	Instructor: TBA	Seats (Total: 8)
	Meets March 8, 2019 - May 24, 2019	
	M 1:00pm - 2:00pm	ONLINE
	Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.	

SURV410 **Introduction to Probability Theory**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH240 and MATH241; or permission of BSOS-Joint Program in Survey Methodology department. Also offered as: STAT410. Credit only granted for: SURV410 or STAT410.

Probability and its properties. Random variables and distribution functions in one and several dimensions. Moments, characteristic functions, and limit theorems.

0101	Maria Cameron MWF 10:00am - 10:50am	Seats (Total: 28) MTH 0302
0201	Peter Nandori MWF 12:00pm - 12:50pm	Seats (Total: 32) MTH 0306
0301	Casey Cremins MWF 2:00pm - 2:50pm	Seats (Total: 28) MTH 0305
0501	Abram Kagan TuTh 12:30pm - 1:45pm	Seats (Total: 30) MTH 0106
0601	Vadim Kaloshin TuTh 3:30pm - 4:45pm	Seats (Total: 30) MTH 0201

SURV420 **Introduction to Statistics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: SURV410 or STAT410. Also offered as: STAT420. Credit only granted for: STAT420 or SURV420.

Mathematical statistics, presenting point estimation, sufficiency, completeness, Cramer-Rao inequality, maximum likelihood, confidence intervals for parameters of normal distributions, chi-square tests, analysis of variance, regression, correlation, and nonparametric methods.

0101	Takumi Saegusa TuTh 2:00pm - 3:15pm	Seats (Total: 28) MTH 0201
0201	Jian Lun Xu TuTh 5:00pm - 6:15pm	Seats (Total: 30) MTH 0304

SURV440 **Sampling Theory**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: STAT401 or STAT420. Credit only granted for: STAT440 or SURV440.

Simple random sampling, sampling for proportions, estimation of sample size, sampling with varying probabilities of selection, stratification, systematic selection, cluster sampling, double sampling, and sequential sampling.

0101	Michael Elliott	Seats (Total: 15)
	Meets January 9, 2019 - April 23, 2019	
	MW 8:30am - 10:00am	LEF 1208

SURV616 **Statistical Modeling II**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SURV615.

Builds on the introduction to linear models and data analysis provided in Statistical Methods I. Topics include analysis of longitudinal data and time series, categorical data analysis and contingency tables, logistic regression, log-linear models for counts, statistical methods in epidemiology, and introductory life testing.

0101	Taylor Lewis	Seats (Total: 20)
	Meets January 15, 2019 - April 23, 2019	
	Tu 5:00pm - 7:40pm	LEF 2208

SURV622 **Fundamentals of Data Collection II**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of Instructor required; or fundamentals of Data Collection I.

This is the second course in a two-semester sequence that provides a broad overview of the processes that generate data for use in social science research. Students will gain an understanding of different types of data and how they are created, as well as their relative strengths and weaknesses. A key distinction is drawn between data that are designed, primarily survey data, and those that are found, such as administrative records, remnants of online transactions, and social media content. The course combines lectures, supplemented with assigned readings, and practical exercises. The second semester builds on the discussion of survey mode during the first semester, considering the role played by interviewers in telephone and in-person surveys and their effects on the data collected. Students next are introduced to the methods for extracting and re purposing found data for social science research. Methods for the classification of text, with an emphasis on automated coding methods, are introduced and selected applications considered (e.g., coding of open-ended survey responses, classification of the sentiments expressed in social media posts). Issues in using survey data and administrative records to measure change over time (longitudinal comparisons) are explored. The term concludes with an examination of methods for evaluating the quality of both designed and found data.

0101	Katharine Abraham, Frederick Conrad	Seats (Total: 25)
	Meets January 14, 2019 - April 22, 2019	
	M 3:30pm - 6:30pm	LEF 1208

SURV625 **Applied Sampling**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Must have completed a course in statistics approved by department.

Practical aspects of sample design. Topics include: probability sampling (including simple random, systematic, stratified, clustered, multistage and two-phase sampling methods), sampling with probabilities proportional to size, area sampling, telephone sampling, ratio estimation, sampling error estimation, frame problems, nonresponse, and cost factors.

0101	Brady West	Seats (Total: 15)
	Meets January 9, 2019 - April 23, 2019	
	W 9:00am - 11:30am	LEF 2208

SURV630 **Questionnaire Design and Evaluation**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: SURV430 and SURV630.

The stages of questionnaire design; developmental interviewing, question writing, question evaluation, pretesting, and questionnaire ordering and formatting. Reviews of the literature on questionnaire construction, the experimental literature on question effects, and the psychological literature on information processing. Examination of the diverse challenges posed by self versus proxy reporting and special attention is paid to the relationship between mode of administration and questionnaire design.

0101	Ting Yan	Seats (Total: 15)
	Meets January 15, 2019 - April 23, 2019	
	Tu 1:00pm - 3:00pm	LEF 1208
	Contact instructor or department for details.	

SURV631 **Questionnaire Design**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Permission of BSOS-Joint Program in Survey Methodology department.

This course introduces students to the stages of questionnaire development. The course reviews the scientific literature on questionnaire construction, the experimental literature on question effects, and the psychological literature on information processing. It will also discuss the diverse challenges posed by self- versus proxy-reporting and special attention is paid to the relationship between mode of administration and questionnaire design. Students will also get hands-on experience in developing their own questionnaire.

SVW1	Instructor: TBA	Seats (Total: 10)
	Meets March 21, 2019 - May 9, 2019	
	Th 12:00pm - 12:50pm	ONLINE
	Contact instructor or department for details.	
	This online section is a condensed version of the on-site section. The material covered and workload are comparable. Students must have access to a standalone web camera and a headset to participate in the weekly online meetings. To apply for permission and to request a seat, please visit: https://jointprogram.umd.edu/online/our-courses.	

SURV635 **Usability Testing for Survey Research**

Credits: 1 Grading Method: Regular, Audit

Recommended: Students should be familiar with the basics of questionnaire design. Experience with cognitive testing is a plus, but not a requirement. Restriction: Must be in a major within the BSOS-Joint Program in Survey Methodology department; or permission of BSOS-Joint Program in Survey Methodology department.

Introduces the concepts of usability and usability testing and why they are needed for survey research. The course provides a theoretical model for understanding the respondent-survey interaction and then provides practical methods for incorporating iterative user-centered design and testing into the survey development process. The course provides techniques and examples for designing, planning, conducting and analyzing usability studies on web or mobile surveys

SVW1	Instructor: TBA **Meets February 4, 2019 - February 27, 2019** W 8:00am - 9:00am Contact instructor or department for details. *Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.*	Seats (Total: 8) ONLINE

SURV667 **Introduction to Record Linkage with Big Data Applications**

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Restriction: Permission of BSOS-Joint Program in Survey Methodology department.

Methods to combine data on given entities (people, households, firms etc.) that are stored in different data sources. By showing the strengths of these methods and by providing numerous practical examples the course will demonstrate the various benefits of record linkage. The participants will also learn about potential pitfalls record linkage projects may face.

SVW1	Instructor: TBA **Meets February 5, 2019 - February 26, 2019** Tu 1:00pm - 2:00pm Contact instructor or department for details. *Contact department or instructor for details. Students must have access to a standalone web camera and a headset to participate inthe weekly online meetings. To apply for permission and to request a seat, please visit: https://jointprogram.umd.edu/online/our-courses.*	Seats (Total: 13) ONLINE

SURV699 **Special Topics in Survey Methodology; Readings in Survey Methodology**

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

0101	Yan Li	Seats (Total: 10)
	Contact instructor or department for details.	

SURV699C **Special Topics in Survey Methodology; Big Data in Immigration Research**

Credits: 3 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

Prerequisites: At least one statistics course, basic familiarity with R, Python or SAS. Data from traditional sources (e.g., national population censuses, sample surveys, and administrative sources) on migration and immigration are limited in quantity and quality, and new alternatives have recently emerged. Some of these new types of "Big Data" are particularly promising for the study of migration-related phenomena. These include mobile phone call logs, Internet activity (e.g., Google searches, tracking of online media content use), geo-referenced social media activity, and other passively collected (mobile) data. This course is shared between the University of Maryland and University of Mannheim, and students will virtually attend the same class/lecture and then collaborate via online tools. Students from the two partnering universities will form international groups to collaboratively work on the collection and analysis of Big Data to answer immigration-related research questions.

0101	Christopher Antoun	Seats (Total: 12)
	Meets February 14, 2019 - May 22, 2019	
	Th 9:30am - 11:10am	LEF 1208

SURV699J **Special Topics in Survey Methodology; General Linear Models (G.L.M)**

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

Prerequisite: A sound understanding of the linear regression models (OL S), knowledge in linear algebra and calculus is useful. The main focus lies on the introduction to statistical models and estim ators beyond linear regression useful to a social and economic scientis ts. The first two units are dedicated to an introduction to a maximum likelihood estimation while the rest of the units will discuss generali zed linear models (GLS) for binary choice decisions (Logit, Probit), or dinal dependent variables, and count data (Poisson, Negative Binomial).

SVW1	Instructor: TBA	Seats (Total: 8)
	Meets March 7, 2019 - May 2, 2019	
	Th 2:00pm - 3:00pm	ONLINE
	Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.	

SURV699Q **Special Topics in Survey Methodology; Web Survey Methodology**

Credits: 2 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.

SVW1	Instructor: TBA	Seats (Total: 8)
	Meets January 14, 2019 - March 8, 2019	
	F 8:00am - 8:50am Contact instructor or department for details.	ONLINE

SURV701 **Analysis of Complex Sample Data**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: SURV625.

Analysis of data from complex sample designs covers: the development and handling of selection and other compensatory weights; methods for handling missing data; the effect of stratification and clustering on estimation and inference; alternative variance estimation procedures; methods for incorporating weights, stratification and clustering, and imputed values in estimation and inference procedures for complex sample survey data; and generalized design effects and variance functions. Computer software that takes account of complex sample design in estimation.

0101	Yan Li	Seats (Total: 15)
	Meets January 24, 2019 - May 9, 2019	
	Th 1:00pm - 3:45pm	LEF 2208

SURV702 **Analysis of Complex Survey Data**

Credits: 2 Grading Method: Regular, Audit

Prerequisite: One or more graduate courses in statistics covering techniques through OLS and logistic regression, a course in applied sampling methods (e.g., SURV625), or permission of the instructor. Restriction: Permission of BSOS-Joint Program in Survey Methodology department.

The development and handling of selection and other compensatory weights for survey data analysis; the effects of stratification and clustering on survey estimation and inference; alternative variance estimation procedures for estimated survey statistics; methods and computer software that take into account the effects of complex sample designs on survey estimation and inference; and methods for handling missing data, including weighting adjustment and imputation.

SVW1	Benjamin Reist **Meets January 9, 2019 - February 27, 2019** W 9:00am - 10:00am Contact instructor or department for details. *Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.*	Seats (Total: 8) ONLINE

SURV704 **Computer-Based Content Analysis II**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Prerequisite: SURV703; and background knowledge in programming in Python and SQL structures. Recommended: SURV736.

Investigates the foundations of Natural Language Processing (NLP) as tool for analyzing natural language texts in the social sciences, thus providing an alternative to traditional ways of data generation through surveys. The course introduces general use cases for NLP, provides a guide to standard operations on text as well as their implementation in the Python-based Natural Language Toolkit (NLTK) and introduces the text mining functionalities of the WEKA Machine Learning workbench. The theory part of the course worth one credit can be supplemented by an optional project part worth another credit point

SVW1	Instructor: TBA **Meets January 10, 2019 - January 31, 2019** Th 7:00am - 8:00am Contact instructor or department for details. *Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.*	Seats (Total: 8) ONLINE

SURV721 **Total Survey Error and Data Quality II**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: SURV720. Restriction: Permission of instructor. Credit only granted for: (SURV720 and SURV721) or SURV723. Formerly: SURV723.

Second part of a review of total survey error structure of sample survey data. Reviewing current research findings on the magnitudes of different error sources. Students will continue work on an independent research project which provides empirical investigation of one or more error source. An analysis paper presenting findings of the project will be submitted at the end of the course.

0101	Sunghee Lee	Seats (Total: 20)
	Meets January 10, 2019 - April 23, 2019	
	Th 10:00am - 12:30pm	LEF 1218

SURV726 **Multiple Imputation**

(Perm req)

Credits: 1

Grading Method: Regular, Audit

Prerequisite: Be comfortable with generalized linear models and basic probability theory through coursework or work experience; and familiarity with the statistical software R; and must have completed Surv 725 Item Nonresponse and Imputation or be familiar with the content through relevant work experience. Restriction: Permission of BSOS-Joint Program in Survey Methodology department.

This course will provide a detailed introduction to multiple imputation, a convenient strategy for dealing with (item) nonresponse in surveys. We will motivate the concept and illustrate why multiple imputation should generally be preferred over single imputation methods. The main focus of the course will be on strategies to generate (multiple) imputations and how to deal with common problems when applying the methods for large scale surveys. We will also discuss various options for assessing the quality of the imputations. All concepts will be demonstrated using software illustrations in R.

SVW1	Joerg Drechsler	Seats (Total: 8)
	Meets January 16, 2019 - February 6, 2019	
	W 2:00pm - 2:50pm Contact instructor or department for details.	ONLINE
	Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.	

SURV735 **Data Confidentiality and Statistical Disclosure Control**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: Must have familiarity with the statistical software R; and must have completed a basic statistics course in regression modeling. Restriction: Permission of BSOS-Joint Program in Survey Methodology department.

This course will provide a gentle introduction to statistical disclosure control with a focus on generating synthetic data for maintaining the confidentiality of the survey respondents. The first part of the course will introduce several traditional approaches for data protection that are widely used at statistical agencies. Some limitations of these approaches will also be discussed. The second part of the course will introduce synthetic data as a possible alternative. This part of the course will discuss different approaches to generating synthetic datasets in detail. Possible modeling strategies and analytical validity evaluations will be assessed and potential measures to quantify the remaining risk of disclosure will be presented. To provide the participants with hands on experience, all steps will be illustrated using simulated and real data examples in R.

SVW1	Joerg Drechsler	Seats (Total: 15)
	Meets March 20, 2019 - May 15, 2019	
	W 2:00pm - 3:00pm Contact instructor or department for details.	ONLINE
	Students must have access to a standalone web camera and a headset toe participate in the weekly meetings.	*s*

SURV736 **Introduction to Web Scraping with R**

Credits: 1 Grading Method: Regular, Audit

Prerequisite: Students are expected to be familiar with the statistical software R. Recommended: Knowledge about the tidyverse packages, in particular, dplyr, plyr, magrittr, and stringr. Restriction: Permission of BSOS-Joint Program in Survey Methodology department.

Provides a condensed overview of web technologies and techniques to collect data from the web in an automated way. To this end, students will use the statistical software R. The course introduces fundamental parts of web architecture and data transmission on the web. Furthermore, students will learn how to scrape content from static and dynamic web pages and connect to APIs from popular web services. Finally, practical and ethical issues of web data collection are discussed.

SVW1	Instructor: TBA	Seats (Total: 8)
	Meets April 30, 2019 - May 28, 2019	
	Tu 7:00am - 8:00am	ONLINE
	Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.	

SURV742 **Inference from Complex Surveys**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Prerequisite: SURV440.

Inference from complex sample survey data covering the theoretical and empirical properties of various variance estimation strategies (e.g., Taylor series approximation, replicated methods, and bootstrap methods for complex sample designs). Incorporation of those methods into inference for complex sample survey data. Variance estimation procedures applied to descriptive estimators and to analysis of categorical data. Generalized variances and design effects presented. Methods of model-based inference for complex sample surveys examined, and results contrasted to the design-based type of inference used as the standard in the course. Real survey data illustrating the methods discussed. Students will learn the use of computer software that takes account of the sample design in estimation.

0101	Robert Fay	Seats (Total: 20)
	Meets January 15, 2019 - April 16, 2019	
	Tu 1:00pm - 2:30pm	LEF 1218
	Contact instructor or department for details.	

SURV747 **Practical Tools for Sampling and Weighting Part I**

(Perm req)

Credits: 2

Grading Method: Regular, Audit

Prerequisite: Sampling theory (e.g., SURV440 or equivalent) and Applied sampling (e.g., SURV626 or equivalent). Recommended: Experience in the use of statistical software package R. Restriction: Permission of BSOS-Joint Program in Survey Methodology department.

A statistical methods class appropriate for second year Master's students and PhD students. The course will be a combination of hands-on applications and general review of the theory behind different approaches to sampling and weighting. Topics covered include sample size calculations using estimation targets based on relative standard error, margin of error, and power requirements. Use of mathematical programming to determine sample sizes needed to achieve estimation goals for a series of subgroups and analysis variables. Resources for designing area probability samples. Methods of sample allocation for multistage samples. Base weights are discussed in context of the sample designs chosen.Note: Part II of the course will provide a more in-depth discussion on weighting.

SVW1	Jill Dever	Seats (Total: 8)
	Meets March 25, 2019 - May 13, 2019	
	M 12:00pm - 1:00pm	ONLINE
	Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.	

SURV751 **Introduction to Big Data and Machine Learning**

(Perm req) Credits: 1 Grading Method: Regular, Audit

Prerequisite: Familiarity with the statistical software R. Restriction: Permission of BSOS-Joint Program in Survey Methodology department. Additional information: Familiarity with model building and model selection as well as the R program is not required but could also be helpful. Students without prior knowledge in R should plan on using free online resources to make themselves familiar with the basics of this statistical programming language.

This is an introduction to the uses and methods of working with Big data. Students explore how Big Data concepts, processes and methods can be used within the context of Survey Research.

SVW1	Frauke Kreuter	Seats (Total: 8)
	Meets April 2, 2019 - April 23, 2019	
	Tu 1:00pm - 2:00pm Contact instructor or department for details.	ONLINE
	Students must have access to a standalone web camera and a headset to participate in the weekly meetings.	

SURV752 Introduction to Data Visualization

(Perm req) Credits: 1 Grading Method: Regular, Audit

Prerequisite: Basic statistics understanding and bivariate linear regression. Recommended: Experience in the use of statistical software package R. Restriction: Permission of BSOS-Joint Program in Survey Methodology department.

Data visualization is one of the most powerful tools to explore, understand and communicate patterns in quantitative information. At the same time, good data visualization is a surprisingly difficult task and demands three quite different skills: substantive knowledge, statistical skill, and artistic sense. The course is intended to introduce participants to a) key principles of analytic design and useful visualization techniques for the exploration and presentation of univariate and multivariate data. This course is highly applied in nature and emphasizes the practical aspects of data visualization in the social sciences. Students will learn how to evaluate data visualizations based on principles of analytic design, how to construct compelling visualizations using the free statistics software R, and how to explore and present their data with visual methods.

SVW1	Instructor: TBA	Seats (Total: 8)
	Meets April 16, 2019 - May 7, 2019	
	Tu 12:00pm - 1:00pm	ONLINE
	Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.	

SURV772 Survey Design Seminar

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: (SURV770 and SURV771) or SURV772. Formerly: SURV770 and SURV771.

Students present solutions to design issues presented to the seminar. Readings are selected from literatures not treated in other classes and practical consulting problems are addressed.

0101	Michael Tragoutt, James Lepkowski	Seats (Total: 10)
	Meets January 15, 2019 - April 23, 2019	
	Tu 10:00am - 12:30pm	LEF 1218

SURV798B **Advanced Topics in Survey Methodology; Small Area Estimation**

Credits: 3 Grading Method: Regular

Individual instruction.

Prerequisite: STAT420/SURV420 or equvialent; or permission of instructor. Model-based small-area estimation has portance oer the past two decades. Students will learn the state-of-the-art model-based small-area estimation methods (e.g., empirical best prediction, empirical Bayes andhierarchical Bayes, etc.) and the associated important issues regarding measures of uncertainty, model selection, model diagnostics, design-consistency, etc. The bootstrap, jackknife, and delta methods will be discussed in details in the context of measuring uncertainty of EB/EBP. In order to explain certain concepts, it will be necessary to gothrough a few derivations. Data analyses using several real life examples will be presented. Application of SAS and BUGS in certain small-area data analyses will be shown. The course includes practical exercises.

0101	Partha Lahiri	Seats (Total: 15)
	Tu 9:30am - 12:00pm	LEF 2208

SURV829 **Doctoral Research Seminar in Survey Methodology**

(Perm req)

Credits: 3-6 Grading Method: Regular

An advanced research seminar for students preparing to do research or take doctoral comprehensive examinations.

0101	Stanley Presser	Seats (Total: 10)
	Meets January 9, 2019 - April 23, 2019	
	W 1:30pm - 4:00pm	LEF 1218

SURV898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

SURV899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

TDPS Theatre, Dance and Performance Studies — Spring 2019

TDPS201 **Introduction to Technical Production**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in a major within the ARHU-Dance department; or must be in a major within the ARHU-Theatre department. Credit only granted for: DANC210 and THET114 or TDPS201. Formerly: DANC210 and THET114.

Students are provided with an overview of topics related to the technical production of theatre and dance including: scenic, prop and costume construction, lighting, sound and video execution and management structures.

Students must pay a $25 lab fee.

5501	Michael Driggers	Seats (Total: 25)	
	MW 4:00pm - 4:50pm	PAC 1809	
	F 3:30pm - 5:30pm	PAC 1702	Lab

TDPS458U **Special Topics in Advanced Performing Arts; Puppet Cinema: When Film & Puppetry Meet on Stage**

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

Designed for performing arts students. Offers instruction at an advanced level in various aspects of performance such as Voice for the Performing Arts, Movement for the Performing Arts, Acting for the Performing Arts, Partner Dance and a myriad of specific aspects within these genres.

Students must pay a $25 course fee. Using puppetry and live-feed cinematography, this course will explore the question of how we tell stories. We will investigate both practical and theoretical studies of these engaging multi-disciplinary mediums inside and outside of class. It takes a delicate balance to juggle two very different but complimentary mediums. For visual inspiration, we will look at works by Jim Henson, Julie Taymor, Hugo & Ines, The Quay Brothers, Philippe Genty, William Kentridge, Hotel Modern, Paul King, Basil Twist and so much more. There is an expectation that you will also bring in sources for the class to examine. The class will be part lecture based part studio work. We will devise theater exercises and create filmed presentations of art work in class, both in and out of class, individually and in small groups. Both the Midterm and Final Exams will be performance/film based.

5501	Leslie Strongwater, Zvi Sahar M 10:00am - 12:50pm	Seats (Total: 12) PAC 1815

TDPS469 **Advanced Practicum in Stage Management**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

A graded course in stage management for theatre and/or dance productions. A hands-on laboratory experience.

0101	Jenn Schwartz Contact instructor or department for details.	Seats (Total: 10)

TDPS479 **Production Practicum**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

A graded course in a specified practical aspect of mounting a theatre o dance production. It is a hands-on, purely laboratory experience.

Prerequisite: TDPS201. Formerly THET479. A specified practical aspect of mounting a theatre or dance production with hands-on, laboratory experience.

1001	Robert Hunter Contact instructor or department for details.	Seats (Total: 15)
1002	Robert Hunter Contact instructor or department for details.	Seats (Total: 15)
1003	Robert Hunter Contact instructor or department for details.	Seats (Total: 15)
1004	Robert Hunter Contact instructor or department for details.	Seats (Total: 15)

1005	Robert Hunter Contact instructor or department for details.	Seats (Total: 15)	
1006	Robert Hunter Contact instructor or department for details.	Seats (Total: 15)	
1007	Robert Hunter Contact instructor or department for details.	Seats (Total: 15)	
2001	Robert Hunter Contact instructor or department for details.	Seats (Total: 15)	
2002	Robert Hunter Contact instructor or department for details.	Seats (Total: 15)	
2003	Robert Hunter Contact instructor or department for details.	Seats (Total: 15)	
2004	Robert Hunter Contact instructor or department for details.	Seats (Total: 15)	
2005	Robert Hunter Contact instructor or department for details.	Seats (Total: 15)	
2006	Robert Hunter Contact instructor or department for details.	Seats (Total: 15)	

THET Theatre Spring 2019

THET110 **Introduction to the Theatre**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA | General Education: DSHU

In the age of pop music and blockbuster films, of memes and viral videos, we often forget that theatre was one of the original forms of popular entertainment. We will focus on theatre practitioners including actors, directors, designers and backstage personnel to understand how theatre is produced. We will also consider popular entertainment in Europe and America, with a particular focus on musical theatre and Broadway to explore how theatre communicates, resonates, and remains relevant to all audiences.

0101	Caitlin Marshall MW 10:00am - 10:50am W 2:00pm - 2:50pm	Seats (Total: 24) ATL 2324 PHY 1402	 Discussion

0102	Caitlin Marshall MW 10:00am - 10:50am W 3:00pm - 3:50pm	Seats (Total: 24) ATL 2324 PLS 1119	Discussion
0103	Caitlin Marshall MW 10:00am - 10:50am W 11:00am - 11:50am	Seats (Total: 24) ATL 2324 PLS 1111	Discussion
0104	Caitlin Marshall MW 10:00am - 10:50am W 12:00pm - 12:50pm	Seats (Total: 24) ATL 2324 PLS 1180	Discussion
0105	Caitlin Marshall MW 10:00am - 10:50am W 1:00pm - 1:50pm	Seats (Total: 24) ATL 2324 PLS 1111	Discussion
0201	Caitlin Marshall MW 11:00am - 11:50am W 2:00pm - 2:50pm	Seats (Total: 24) ATL 2324 MTH 0402	Discussion
0202	Caitlin Marshall MW 11:00am - 11:50am W 3:00pm - 3:50pm	Seats (Total: 24) ATL 2324 PLS 1115	Discussion
0203	Caitlin Marshall MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 24) ATL 2324 PLS 1184	Discussion
0204	Caitlin Marshall MW 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 24) ATL 2324 PLS 1146	Discussion
0205	Caitlin Marshall MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 24) ATL 2324 PLS 1180	Discussion

THET116 **Fundamentals of Theatrical Design**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Examines theatre as an environmental art that is realized through collaboration between set, costume, and lighting designers.

Students must pay a $25 lab fee.

5501	Peter Leibold, Benjamin Weigel	Seats (Total: 20)	
	TuTh 12:30pm - 2:20pm	PAC 2733	Lab

THET222 **Foundations of Acting and Performance**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Students will become familiar with the tools and process of acting through the discipline of acting exercises, analyzing character and performing. Students will research various theatre artists that have contributed to the acting process. Through monologue and scene work students will learn listening skills, communicative, collaborative and embodiment skills and will learn how to use the self in the imaginative process and research. And, most importantly, students will learn creative process through practice.

Students must pay a $25 lab fee.

5501	Lisa Nathans	Seats (Total: 16)	
	TuTh 1:30pm - 3:20pm	PAC 3732	Lab

THET223 **Text and Context in Western Theatre**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Introduction to the analysis and critique of the play script. Students will have the opportunity to read, analyze, and interpret western dramatic literature from a range of periods and styles. Texts are analyzed from a variety of theatrical analytical perspectives, with an eye towards choices theatre artists must make in the creation of a theatrical production.

0101	Victoria Scrimer	Seats (Total: 15)	
	MW 12:30pm - 1:45pm	PAC 1809	

THET228O **Special Topics in Introduction Theatre and Performance; Costume Crafts**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

This course is offered as part of the TDPS Artist-in-Residence program. Topics covered may include: Intercultural Theatre; Performance Art; Puppetry; Solo Performance; or Theatrical Design.

5501	Lisa Burgess MW 9:00am - 11:50am	Seats (Total: 8) PAC 3749	Lab

THET269B **Special Topics in Study Abroad II; Meaning of Style**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

THET269T **Special Topics in Study Abroad II; 20th Century and Contemporary Spanish Theater**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

THET285 **The Art of Communication and Presentation**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSOC

Credit only granted for: COMM107, COMM200, INAG110, JOUR130, or THET285.

An introduction to the fundamental practice and theory of public speaking and oral communication using theatrical techniques of both performance and the craft of storytelling.

0101	Patrick Crowley MW 12:00pm - 1:50pm	Seats (Total: 25) PAC 3732	
0103	Jonelle Walker TuTh 12:00pm - 1:50pm	Seats (Total: 25) PAC 3730	

THET287 **Subversive Cultures and Performance**

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Credit only granted for: THET289I or THET287. Formerly: THET289I.

Every society has rebels - those who refuse to conform to the mainstream's rigid rules, aesthetics, and beliefs. From unruly skateboarders, punk rockers, bohemian poets, and radical theater performers, to national revolutionary movements and brick-throwing anarchists - such groups form niches that are defined by their exclusion from society. We will look at how their beliefs and actions fit into a particular historical context, and how their actions drive social change.

Also offered as ANTH287. Credit granted for THET287 or ANTH287.

0101	Kathleen Spanos MW 3:30pm - 4:45pm	Seats (Total: 60) TYD 2106

THET294 **Black Theatre and Performance II**

Credits: 3 | Grading Method: Regular | CORE: HA, D | General Education: DSHU, DVUP

Restriction: Sophomore standing or higher.

Thematic and historical survey of African-American drama from the 1960s to the present. Emphasis on sociopolitical context, thematic thrust, issues, styles, the aesthetic reflected in the work, impact on African-American and general theatre audiences.

0101	Leticia Ridley TuTh 11:00am - 12:15pm	Seats (Total: 20) HBK 1108

THET299L **Independent Study; Analyzing Performances**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate with term papers; scenic, lighting, or costume designs; or a stage production.

Contact department for information to register for this course.

THET299Z **Independent Study; Issues of Realism**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate with term papers; scenic, lighting, or costume designs; or a stage production.

Contact department for information to register for this course.

THET310 **Voice for the Actor I**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET116, THET222, THET223, and TDPS201; and must Interview; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Sophomore standing or higher.

Freeing the natural voice. In-depth experience of connection of actor's voice to thought, impulse and emotion. Tools for releasing tension, increasing resonance and range, and refining articulation will be explored.

Students must pay a $25 lab fee.

5501	Lisa Nathans	Seats (Total: 18)	
	TuTh 10:00am - 11:50am	PAC 2740	Lab

THET324 **Character Development**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in THET310 and THET362; or permission of Instructor. And must audition; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Junior standing or higher.

European-based physical approach to acting. Primary focus on character development, may include creating original characters and learning how to bring to life an already scripted character. Techniques to explore the soul and psychology of characters and their physical qualities, voice, rhythm and movement.

5501	Leslie Felbain	Seats (Total: 12)	
	TuTh 1:30pm - 3:20pm	PAC 3736	

THET326 **Viewpoints**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET222, THET223, THET116, and TDPS201; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Credit only granted for: THET328V or THET326. Formerly: THET328V.

Viewpoints is a movement-based performance course for students who already have a foundation in the basics of acting and/or dance. The Viewpoints are a set of tools and vocabulary; using 9 categories of time and space, students will fully explore the possibilities of using their physical instruments (the body) to their fullest on stage.

Students must pay a $25 lab fee.

5501	Jennifer Newsham	Seats (Total: 20)	
	MW 2:00pm - 3:50pm	PAC 2740	Lab

THET328A **Special Topics in Intermediate Theatre and Performance; Stage Design & Opera**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics covered include: Intercultural Theatre, Performance Art, Puppetry, Solo Performance, or Theatrical Design.

The music in opera establishes a world in which the action and drama takes place. This class will discuss what elements of the world are needed to help the structure of the story while helping the audience understand motifs and themes in an opera. Students will become familiar with design concepts and strengthen a vocabulary to communicate their ideas of their worlds to others. Students must pay a $25 lab fee.

5501	Christopher Brusberg	Seats (Total: 12)
	MW 12:00pm - 1:50pm	PAC 2733

THET328Y **Special Topics in Intermediate Theatre and Performance; Site Specific Performance**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics covered include: Intercultural Theatre, Performance Art, Puppetry, Solo Performance, or Theatrical Design.

Students must pay a $25 lab fee. An introduction to site-specific theatre, in terms of both theory and practice. Students will learn the theoretical underpinnings of site-specific while examining historical and contemporary case studies and applying their knowledge through practice. The semester will culminate in a performance of their own site-specific work, developed with their classmates. This course will question the relationships between theory and practice, space and story, and performer and audience, while acquainting students with a popular form of theatre that moves outside of the proscenium.

5501	Fraser Stevens, Kelley Holley	Seats (Total: 12)
	MW 12:00pm - 1:50pm	PAC 2740

THET369X **Special Topics in Study Abroad III; Fourth-Year French II**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

THET377 **Lighting Design I**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET222, THET223, and THET116. And THET114; or TDPS201; or permission of ARHU-School of Theatre, Dance & Performance Studies department.

A study of the theories of electrification, instruments, design, color, and control for the stage. Practical work on productions.

Students must pay a $25 lab fee.

5501	Peter Leibold, Lauren Gallup MW 10:00am - 11:50am	Seats (Total: 10) PAC 2733	Lab

THET380 **Sound Design**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET116. And THET114; or TDPS201; or permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Sophomore standing or higher.

Theatre Sound Design is a first course in designing sound for stage productions.

5501	Paul Jackson MW 10:00am - 11:50am	Seats (Total: 10) PAC 2727

THET386 **Experiential Learning**

Credits: 3-6

Grading Method: Regular, Pass-Fail

Restriction: Junior standing or higher; and permission of ARHU-School of Theatre, Dance & Performance Studies department.

0801	Leslie Felbain Contact instructor or department for details.	Seats (Total: 1)
2003	Cary Gillett Contact instructor or department for details.	Seats (Total: 5)

THET391 **Theatre History II**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

The history of Western theatre from the mid seventeenth century to the early twentieth century, with emphasis on plays and playwrights, architecture and decor, acting and costuming, and significant personalities. Includes explorations of interrelationships between Western theatre and the theatre of other cultures.

0101	Caitlin Marshall TuTh 12:30pm - 1:45pm	Seats (Total: 25) PAC 1809
0102	Faedra Carpenter TuTh 9:30am - 10:45am	Seats (Total: 15) PAC 1809

THET399 **Independent Study**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate in term papers, scenic; lighting, or costume designs; or a stage production.

Contact department for information to register for this course.

THET399F **Independent Study; Modern British Theater**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate in term papers, scenic; lighting, or costume designs; or a stage production.

Contact department for information to register for this course.

THET399H **Independent Study; London Stage**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate in term papers, scenic; lighting, or costume designs; or a stage production.

Contact department for information to register for this course.

THET399L **Independent Study; Contemporary British Drama**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate in term papers, scenic; lighting, or costume designs; or a stage production.

Contact department for information to register for this course.

THET399X **Independent Study; The London Stage**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate in term papers, scenic; lighting, or costume designs; or a stage production.

Contact department for information to register for this course.

THET408P **Seminar: Theory and Performance Studies; Popular Performance & Popular Culture**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Studies in theatre theory and performance studies from classical antiquity to the present.

Students will examine multidisciplinary modes of cultural production in various mediums including but not limited to theatre, performance art, film, visual art, advertising, and music video. Through the lens of performance, the class will interrogate how cultural products operate asperformances of contemporary everyday life. Topics may include the cultural logic of Beyonc , sports culture, urbanity, indigenous water protectors and protest, and hip hop culture among other objects that occupy the national imagination questioning what they reveal about the popular body and its political status.

0101	Leslie Gray MW 2:00pm - 3:15pm	Seats (Total: 15) PAC 1815

THET428J **Special Topics in Advanced Theatre and Performance; Performance and Sexuality in Early Modern Japan**

Credits: 3 Grading Method: Regular

This course is offered as part of the School of Theatre, Dance, and Performance Studies' Artist in Residence program. Topics covered may include: Intercultural Theatre; Performance Art; Puppetry; Solo Performance; or Theatrical Design.

Also offered as JAPN498J. Credit only granted for JAPN498J or THET428J.

0101	Jyana Browne TuTh 11:00am - 12:15pm	Seats (Total: 30) JMZ 2206

THET428Y **Special Topics in Advanced Theatre and Performance; Advanced Training in TYA Theatre: Andy's Summer Playhouse**

(Perm req)

Credits: 3 Grading Method: Regular

This course is offered as part of the School of Theatre, Dance, and Performance Studies' Artist in Residence program. Topics covered may include: Intercultural Theatre; Performance Art; Puppetry; Solo Performance; or Theatrical Design.

Prerequisite: THET328D - Theatre for Young Audiences or permission of instructor. For permission please email Jared Mezzocchi at jaredmez@umd.edu. In this advanced course, we will be emphasizing administrative and artistic development for the upcoming season at Andy's Summer Playhouse, named 2018 SUMMER OF LEGACY. Andy's Summer Playhouse is a 48 year old non-for-profit children's theater in Wilton, NH, focusing on original works written, directed and designed by professionals while performed and operated by children ages 8-18. The productions are intended for audiences of all ages. In this course, students will be asked to investigate and develop the programs offered while also thinking outside of the box regarding marketing and outreach for the local communities around the theater. This course offers real-life investigations on how to operate and grow a small non-for-profit performing arts organization while also learning the entrepreneurial skills to be an independent artist.

0101	Jared Mezzocchi	Seats (Total: 10)
	Contact instructor or department for details.	
	Contact department or instructor for details.	

THET429 **Actor's Studio**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Participation in dramatic roles executed under faculty supervision in the department's productions. Eligible students must make commitments and plan performances with course instructor during pre-registration.

Contact department for information to register for this course.

THET440 **Advanced Playwriting**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: THET340; or permission of instructor. And permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department. Credit only granted for: THET440 or THET499P. Formerly: THET499P.

Ensemble-based writer's workshop. It is the second part of a two-course sequence and is designed for students who already have a foundation in the basics of playwriting or who are other wise well-versed in the art of theatre and dramatic structure. Through exploratory writing sequences, the reading of full-length plays, and in-class readings of work-in-progress, students will continue to deepen their craft and develop the script for a new full-length play.

Students must pay a $25 lab fee.

5501	Jennifer Newsham	Seats (Total: 12)
	TuTh 10:00am - 11:50am	PAC 1924

THET451 **Musical Theatre Workshop I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must audition. Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Development of the ability to move, act and express through the media of lyric and music.

5501	Scot Reese	Seats (Total: 12)
	Th 1:30pm - 4:40pm	PAC 2740

THET471 **Design Studio in Scenery**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET371; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Also offered as: THET639. Credit only granted for: THET471 or THET639.

Advanced study of scenic design for the theatre. Particular design projects will vary.

Students must pay a 25 lab fee.

5501	Daniel Conway	Seats (Total: 4)	
	TuTh 10:00am - 11:50am	PAC 2755	Lab

THET474 **Advanced Stage Management**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET114 or TDPS201; and (THET116, THET222, THET223, and THET274); and permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department; and sophomore standing or higher.

Intensive practical study of the techniques and procedures for stage management.

Students must pay a $25 lab fee.

5501	Cary Gillett	Seats (Total: 12)
	M 2:00pm - 4:50pm	PAC 1924

THET475 **History of Art, Architecture, and Decor for the Theatre**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET114 or TDPS201; and (THET116, THET222, and THET223); and permission of ARHU-School of Theatre, Dance & Performance Studies department. Also offered as: THET670. Credit only granted for: THET475 or THET670.

Study of Western art, architecture, and decor and their practical application to theatrical production.

5501	Mikhail Kachman	Seats (Total: 10)
	TuTh 2:30pm - 3:45pm	PAC 2733

THET477 **Design Studio in Lighting**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: THET377; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Also offered as: THET659. Credit only granted for: THET477 or THET659.

Designed for students who have successfully completed THET377 and wish to further develop their lighting design skills. Emphasis is on theoretical design of productions and realized light lab projects. Particular design projects will vary.

Students must pay a $25 lab fee.

5501	Andrew Cissna	Seats (Total: 6)	
	M 1:00pm - 4:00pm	PAC 2727	Lab

THET488A **Special Topics in Theatre History Before 1800; Theatre Architecture from Minoans to the Baroque**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics in the history of world theatre and performance from the Greeks through 1800.

0101	Franklin Hildy	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	PAC 1815

THET489D **Special Topics in Theatre History from 1800 to Present; Asian American Theatre**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Topics in the history of world theatre and performance from 1800 to present.

0101	Jenna Gerdsen	Seats (Total: 15)
	MW 11:00am - 12:15pm	PAC 1809

THET497 **Non-Traditional Theatre**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit , D

Seminar exploring American and European experimental performance since 1960. Topics include experimental theatre, performance art, pornography and performance, gender and performance, and popular culture and performance. Topics are treated historically and theoretically. Student-produced performance projects are an important component of the seminar.

Contact department for information to register for this course.

THET499 **Independent Study**

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

An independent study course in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate with term papers, scenic or costume designs, or a stage production.

Contact department for information to register for this course.

THET499G **Independent Study; Realism and Theater Naturalism**

Credits: 1-3

Grading Method: Regular, Pass-Fail, Audit

An independent study course in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate with term papers, scenic or costume designs, or a stage production.

Contact department for information to register for this course.

THET499Q **Independent Study; Theatrical Forms and Genres**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

An independent study course in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate with term papers, scenic or costume designs, or a stage production.

Contact department for information to register for this course.

THET499R **Independent Study; Issues of Realism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An independent study course in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate with term papers, scenic or costume designs, or a stage production.

Contact department for information to register for this course.

THET499Y **Independent Study; The London Stage**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An independent study course in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate with term papers, scenic or costume designs, or a stage production.

Contact department for information to register for this course.

THET499Z **Independent Study; The London Stage**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An independent study course in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate with term papers, scenic or costume designs, or a stage production.

Contact department for information to register for this course.

THET608A **Seminar: Theory and Performance Studies; Performance, Activism, and Aesthetics of Risk**

Credits: 3 Grading Method: Regular, Audit

A repeatable seminar on special topics in theory of the Theatre and Performance Studies.

0101	James Harding	Seats (Total: 10)	
	Th 4:00pm - 6:30pm	PAC 1815	

THET608Q **Seminar: Theory and Performance Studies; Staging Black Queer Lives**

Credits: 3 Grading Method: Regular, Audit

A repeatable seminar on special topics in theory of the Theatre and Performance Studies.

Also offered as AMST628J. Credit only granted for THET608Q or AMST628J.

0101	Tabitha Chester	Seats (Total: 10)	
	Tu 2:00pm - 4:30pm	PAC 1809	

THET639 **Advanced Design Studio in Scenery**

Credits: 3 Grading Method: Regular, Audit

A repeatable course that allows students to progress in their design training through a series of carefully and individually structured assignments and projects.

Students must pay a $25.00 lab fee.

5501	Mikhail Kachman	Seats (Total: 8)	
	Tu 9:30am - 12:20pm	PAC 2733	Lab

THET649 **Advanced Design Studio in Costume**

Credits: 3 Grading Method: Regular, Audit

A series of carefully and individually structured assignments and projects that allows students to progress in their design training.

5501	Ivania Stack	Seats (Total: 10)	
	M 1:00pm - 3:50pm	PAC 2755	Lab

THET659 **Advanced Design Studio in Lighting**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

A repeatable course that allows students to progress in their design training through a series of carefully and individually structured assignments and projects.

Students must pay $25 lab fee.

5501	Andrew Cissna	Seats (Total: 15)	
	M 1:00pm - 4:00pm	PAC 2727	Lab

THET669 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Contact department for information to register for this course.

THET669M **Independent Study; Advanced Media II: Public Projections**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Students must pay a $25 lab fee.

5501	Jared Mezzocchi	Seats (Total: 8)
	F 9:00am - 12:00pm	PAC 2727

THET670 **Period Style for the Theatre: Fashion and Decor**

Credits: 3 Grading Method: Regular, Audit

Recommended: THET600. Also offered as: THET475. Credit only granted for: THET475 or THET670.

A study of environmental decor, theatrical architecture, historic ornament and fashion through the ages and their practical application for theatrical production.

5501	Mikhail Kachman	Seats (Total: 10)
	TuTh 2:30pm - 3:45pm	PAC 2733

THET672 **Theory of Visual Design in Scenery**

Credits: 3 Grading Method: Regular, Audit

A historical and theoretical study of design practices in performing arts with an emphasis in scene design and interpretation.

Students must pay a $25.00 lab fee.

5501	Daniel Conway	Seats (Total: 4)	
	TuTh 10:00am - 11:50am	PAC 2755	Lab

THET678 **Theory of Visual Design For the Performing Arts**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

A historical and theoretical study of design practices in the performing arts.

Students must pay a $25.00 lab fee.

5501	Matthew Torney M 9:00am - 11:50am	Seats (Total: 6) PAC 2755	Lab
5516	Daniel Conway M 9:00am - 11:50am	Seats (Total: 6) PAC 2755	Lab

THET679 **Advanced Design Studio in Multimedia and Projection Design**

Credits: 3

Grading Method: Regular, Audit

A repeatable course that allows students to progress in their design training through a series of carefully and individually structured assignments and projects.

Students must pay a $25.00 lab fee.

5501	Jared Mezzocchi W 9:00am - 12:00pm	Seats (Total: 5) PAC 2827	Lab

THET688A **Special Problems in Drama; Theatre Architecture from the Minoans to the Baroque**

Credits: 3

Grading Method: Regular, Audit

The preparation of adaptations and other projects in dramaturgy.

0101	Franklin Hildy TuTh 11:00am - 12:15pm	Seats (Total: 5) PAC 1815

THET698G **Seminar: Theatre History; History of Theatre to 1700**

Credits: 3

Grading Method: Regular, Audit

Studies in theatre history from classical antiquity to the present.

0101	Franklin Hildy W 4:00pm - 6:30pm	Seats (Total: 10) PAC 1815

THET788 **Master's Tutorial**

(Perm req)

Credits: 1-6 Grading Method: Regular, Audit

Collaboration with a faculty member on joint creative and artistic projects.

0201	Franklin Hildy Contact instructor or department for details.	Seats (Total: 5)
0601	James Harding Contact instructor or department for details.	Seats (Total: 5)
1101	Mikhail Kachman Contact instructor or department for details.	Seats (Total: 5)
1301	Brian MacDevitt Contact instructor or department for details.	Seats (Total: 5)
1601	Daniel Conway Contact instructor or department for details.	Seats (Total: 5)
1701	Helen Huang Contact instructor or department for details.	Seats (Total: 5)
2001	Faedra Carpenter Contact instructor or department for details.	Seats (Total: 5)
2005	Laurie Frederik Contact instructor or department for details.	Seats (Total: 5)
2007	Jared Mezzocchi Contact instructor or department for details.	Seats (Total: 5)

THET789 **Master's Practicum**

Credits: 1-6 Grading Method: Regular, Audit

Participation in creative and artistic activities with professional level theatrical organizations.

0201	Franklin Hildy Contact instructor or department for details.	Seats (Total: 5)
0601	James Harding Contact instructor or department for details.	Seats (Total: 6)
1101	Mikhail Kachman Contact instructor or department for details.	Seats (Total: 5)
1301	Brian MacDevitt Contact instructor or department for details.	Seats (Total: 5)
1601	Daniel Conway Contact instructor or department for details.	Seats (Total: 5)
1701	Helen Huang Contact instructor or department for details.	Seats (Total: 5)
2001	Faedra Carpenter Contact instructor or department for details.	Seats (Total: 5)
2005	Laurie Frederik Contact instructor or department for details.	Seats (Total: 5)
2007	Jared Mezzocchi Contact instructor or department for details.	Seats (Total: 5)

THET799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

THET888 **Doctoral Practicum in Theatre**

(Perm req)

Credits: 1-6 Grading Method: Regular

Critical analysis of a phase of a professional field of theatre. Analysis of professional activity through personal observation. Evaluation of the purpose, process, effectiveness, and efficiency of professional activity. Recommendations for training and further research.

0201	Franklin Hildy Contact instructor or department for details.	Seats (Total: 10)

0501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)
0601	James Harding Contact instructor or department for details.	Seats (Total: 10)
2001	Faedra Carpenter Contact instructor or department for details.	Seats (Total: 10)
2005	Laurie Frederik Contact instructor or department for details.	Seats (Total: 10)

THET889 **Doctoral Tutorial in Theatre**

(Perm req)

Credits: 1-6 Grading Method: Regular

Individual research in theatre.

0201	Franklin Hildy Contact instructor or department for details.	Seats (Total: 10)
0501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)
0601	James Harding Contact instructor or department for details.	Seats (Total: 10)
2001	Faedra Carpenter Contact instructor or department for details.	Seats (Total: 10)
2005	Laurie Frederik Contact instructor or department for details.	Seats (Total: 10)

THET898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

THET899 **Doctoral Dissertation Research**

(Perm req)

Credits: 1-10 Grading Method: Regular, Audit

Contact department for information to register for this course.

TLPL Teaching and Learning, Policy and Leadership — Spring 2019

TLPL101 **Inquiry Teaching of STEM in Elementary School**

Credits: 1 Grading Method: Regular

Additional information: Students must allow for a three-hour window between 7:45 AM and 3:15 PM in their schedule for field experiences in a local school 3-4 times during the semester. A background check is required and will be facilitated by the Terrapin Teacher program coordinator.

Explore STEM teaching and learning and classroom complexity, and develop teaching skills through discussion-based, collaborative class sessions, and experiences in local schools. To explore/understand the fundamentals of inquiry teaching, students will observe, plan and teach student-centered lessons.

0101	Julie Brenner M 3:00pm - 4:20pm	Seats (Total: 30) PHY 1108
0201	Steven Karig Th 2:00pm - 3:20pm	Seats (Total: 30) PHY 1108
0301	Kayla White M 3:00pm - 4:20pm	Seats (Total: 18) PHY 1120
0401	Sarah Henson-Darko Th 2:00pm - 3:20pm	Seats (Total: 18) PHY 1120

TLPL102 **Inquiry Teaching of STEM in Middle School**

Credits: 2 Grading Method: Regular General Education: DSSP

Prerequisite: Must have completed TLPL101. Additional information: Attendance at each class session will be vital to student success in the course. To complete the observations and lessons, students must allow a three hour block of time during the local middle school operational hours from 7:45 am to 3:15 pm. A background check is required.

Second course in the Terrapin Teachers teacher preparation sequence. Students gain field experience and continue exploring teaching as a career by conducting teacher observations, and planning and implementing lessons in local, high-need middle school classrooms. Students work closely with UM master teachers to build upon the inquiry-based teaching practices developed in TLPL 101. Students work with mathematics and science curricula while attending to state and district standards, in order to develop and enact lessons that are responsive to students' reasoning in math and science.

0101	Sarah Henson-Darko W 4:00pm - 5:50pm	Seats (Total: 30) PHY 1108

0201	Anita Sanyal Th 4:00pm - 5:50pm	Seats (Total: 30) PHY 1120	

TLPL202 **Good Stories: Teaching Narratives for Peace and Justice**

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

Credit only granted for: EDCI246 or TLPL202. Formerly: EDCI246.

Through the study and use of oral storytelling and digital technologies explore qualities and characteristics of what makes a good story and how stories can be used to advance peace and justice on both individual and social levels.

0101	Margaret Peterson M 11:00am - 12:15pm W 11:00am - 12:15pm	Seats (Total: 30) ESJ 2212 ESJ 2212	 Lab
0102	Margaret Peterson M 11:00am - 12:15pm W 11:00am - 12:15pm	Seats (Total: 30) ESJ 2212 ESJ 2212	 Lab

TLPL250 **Historical and Philosophical Perspectives on Education**

Credits: 3 Grading Method: Regular General Education: DSHU

Credit only granted for: EDPS210 or TLPL250. Formerly: EDPS210.

An examination of illustrative historical and philosophical examples of the interplay of ideas and events in the shaping of educational aims and practices from ancient cultures to modern technological societies.

0101	Kayla Bill MW 10:00am - 11:15am	Seats (Total: 30) EDU 3233
0201	Dale Placek TuTh 9:30am - 10:45am	Seats (Total: 30) JMZ 0125
0301	Joel Miller TuTh 12:30pm - 1:45pm	Seats (Total: 30) EDU 3233
0401	Pamela Callahan MW 12:30pm - 1:45pm	Seats (Total: 30) TWS 1107

TLPL251 **Introduction to Teaching**

Credits: 3 Grading Method: Regular

Credit only granted for: EDCI280 or TLPL251. Formerly: EDCI280.

An exploration of teaching in public schools, grades 1-12: student diversity, societal changes, and the expectations of teachers and public schools. Three hour per week field component.

0101	Lisa Bote Th 4:00pm - 5:50pm Tu 8:00am - 12:00pm	Seats (Total: 8) SQH 1107 Location: TBA	Lab
0102	Lisa Bote Th 4:00pm - 5:50pm W 12:00pm - 4:00pm	Seats (Total: 8) SQH 1107 Location: TBA	Lab
0103	Lisa Bote Th 4:00pm - 5:50pm Th 8:00am - 12:00pm	Seats (Total: 8) SQH 1107 Location: TBA	Lab
0104	Lisa Bote Th 4:00pm - 5:50pm Th 12:00pm - 4:00pm	Seats (Total: 8) SQH 1107 Location: TBA	Lab

TLPL252 **Students, Schooling, and Communities**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Corequisite: TLPL251. Credit only granted for: EDCI297 or TLPL252. Formerly: EDCI297.

Facilitates pre-service teachers' initial look at their personal backgrounds and the ways in which they view the world. Exploration of schools, students and their connections to communities. Draws on preservice teachers' concurrent field experiences.

0101	Jamar Perry MW 9:30am - 10:45am	Seats (Total: 25) EDU 2121

TLPL288E **Special Problems in Education; Developmental Heuristics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership. Available only to freshmen and sophomore students who have definite plans for individual study of approved problems relative to their preparation for teaching.

0101	Tilahun Beyene	Seats (Total: 150)
	Contact instructor or department for details.	

TLPL288K **Special Problems in Education; Reinventing Childhood: Unschooling in the Digital Age**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS, SCIS

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership. Available only to freshmen and sophomore students who have definite plans for individual study of approved problems relative to their preparation for teaching.

0101	Kellie Rolstad	Seats (Total: 60)
	TuTh 11:00am - 12:15pm	TWS 1310

TLPL298 **Special Problems in Education**

(Perm req)

Credits: 1-6 | Grading Method: Regular, Pass-Fail, Audit

Exploration of current problems in teaching, learning, policy and leadership. Available only to students who have definite plans for study of approved problems.

Contact department for information to register for this course.

TLPL300 **Digital Learning Tools and Communities**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Restriction: Minimum cumulative GPA of 2.75; and must be in one of the following programs (Elementary Education; Secondary Educ: Social Studies; Secondary Educ: Art; Secondary Educ: Mathematics; Secondary Educ: Science; Secondary Educ: English Language Arts; Secondary Educ: Foreign Languages). Credit only granted for: EDCI385 or TLPL300. Formerly: EDCI385.

An exploration of the digital tools available for P12 students and their teachers that enhance learning and help build classroom community. This hybrid course will prepare P12 teachers to incorporate instructional technology, digital learning resources, and social media in P12 classrooms.

0101	Ebony Shockley	Seats (Total: 0)
	Contact instructor or department for details.	

0201	Ebony Shockley Contact instructor or department for details.	Seats (Total: 0)
0301	Ebony Shockley Contact instructor or department for details.	Seats (Total: 0)

TLPL305A **Curriculum and Instruction Cluster**

(Perm req)

Credits: 0 Grading Method:

For Seniors only.

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 26)
0201	Instructor: TBA Contact instructor or department for details.	Seats (Total: 26)
0301	Instructor: TBA Contact instructor or department for details.	Seats (Total: 26)

TLPL305B **Curriculum and Instruction Cluster**

(Perm req)

Credits: 0 Grading Method:

For Juniors only.

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 26)
0201	Instructor: TBA Contact instructor or department for details.	Seats (Total: 26)
0301	Instructor: TBA Contact instructor or department for details.	Seats (Total: 26)

TLPL332 **Arts Integration in Elementary Classrooms**

Credits: 3 Grading Method: Regular

Corequisite: TLPL362, EDCI362, TLPL361, and EDCI489. Restriction: Must be in Elementary Education program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: TLPL306 or TLPL332. Formerly: TLPL306.

An exploration of the theories and core practices associated with integrating the arts in ways that promote student learning in the core subjects.

0101	Katherine Coogan Th 12:30pm - 3:15pm	Seats (Total: 0) EDU 2212
0201	Katherine Coogan Th 9:00am - 11:45am	Seats (Total: 0) EDU 2121
0301	Dale Placek W 12:30pm - 3:15pm	Seats (Total: 0) EDU 1315

TLPL340 **Introduction to Children's Literature and Critical Literacy**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Elementary Education program; or must be a Pre-Education Major. Credit only granted for: EDCI443 or TLPL340. Formerly: EDCI443.

Analysis of literary materials for children and youth. Timeless and ageless books, and outstanding examples of contemporary publishing. Evaluation of the contributions of individual authors, illustrators and children's book awards.

0101	Montserrat Cubillos Guzman TuTh 1:00pm - 2:15pm	Seats (Total: 30) SQH 1107
0201	Montserrat Cubillos Guzman TuTh 2:30pm - 3:45pm	Seats (Total: 30) SQH 1107

TLPL360 **Foundations of Education**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS

Credit only granted for: EDPS301 or TLPL360. Formerly: EDPS301.

Social context of education and conflicts over philosophies, values, an goals that are reflected in educational institutions in our pluralistic society. Helps teachers become reflective, critical thinkers about the social and philosophical issues they face and the choices they make.

0101	Charlotte Healy MW 9:00am - 10:15am	Seats (Total: 30) EDU 1121

0301	Lisa Eaker TuTh 11:00am - 12:15pm	Seats (Total: 30) CHM 1228
0401	Nate Burke TuTh 12:30pm - 1:45pm	Seats (Total: 30) LEF 1220
0501	Jason Saltmarsh TuTh 9:30am - 10:45am	Seats (Total: 30) EDU 2119
0601	Lisa Eaker W 4:15pm - 7:00pm	Seats (Total: 30) KNI 1103

TLPL361 **Principles and Methods of Teaching in Elementary Schools**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Corequisite: EDCI322, EDCI362, TLPL306, and EDCI489. Restriction: Must be in Elementary Education program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI397 or TLPL361. Formerly: EDCI397.

Teaching strategies, classroom interactive techniques, and procedures for planning and evaluating instruction in elementary schools. Emphasis on principles of effective instruction, classroom management, and adaptation of instruction for various student populations.

0101	Whitney Sweet Tu 12:30pm - 3:15pm	Seats (Total: 0) EDU 2212
0201	Whitney Sweet Tu 9:00am - 11:45am	Seats (Total: 0) EDU 2212
0301	Katherine Coogan M 9:00am - 11:45am	Seats (Total: 0) EDU 2212

TLPL362 **Curriculum and Instruction in Elementary Education: Social Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Corequisite: EDCI362, TLPL361, EDCI489, and TLPL306. Restriction: Must be in Elementary Education program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI322 or TLPL362. Formerly: EDCI322.

Curriculum, organization and methods of teaching, evaluation of materials, and utilization of environmental resources. Emphasis on multicultural education. Includes laboratory/field experiences.

0101	Vassiliki Eley Tu 9:00am - 11:45am Class time/details on ELMs	Seats (Total: 0) EDU 2121 ONLINE
0201	Lisa Eaker Th 12:30pm - 3:15pm Class time/details on ELMs	Seats (Total: 0) HBK 0109 ONLINE
0301	Catherine McCall W 9:00am - 11:45am Class time/details on ELMs	Seats (Total: 0) EDU 2212 ONLINE

TLPL421 **Practices in Secondary School Science Teaching**

(Perm req)

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: TLPL425. Corequisite: EDCI471 and EDCI474. Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department; and must be in Secondary Educ: Science program. Or minimum cumulative GPA of 2.75. Credit only granted for: TLPL421 or EDCI480. Formerly: EDCI480.

Analyses of student thinking, instructional interpretations, strategies, and techniques in the teaching internship.

0101	Tranae Johnson W 5:15pm - 7:15pm	Seats (Total: 10) EDU 2212

TLPL424 **Interdisciplinary Teaching in the Middle Grades II**

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: EDCI360 and TLPL423. Corequisite: TLPL476 and EDCI460. Restriction: Minimum cumulative GPA of 2.5; and must be in the Middle School Teacher Education Program. Credit only granted for: EDCI414 or TLPL424. Formerly: EDCI414.

For prospective middle school teachers. Planning and implementing interdisciplinary instructional practices in middle school. Draws on the context of and experiences in the student teaching placement. Use of technology and incorporation of technology into instruction.

0101	Janet Walkoe	Seats (Total: 20)
	W 5:00pm - 6:50pm	EDU 2121

TLPL435 **Art Education Methods I**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department. And must be in Secondary Educ: Art program; or must be in Secondary Educ: Art pre-major program. Credit only granted for: EDCI405 or TLPL435. Formerly: EDCI405.

Methods I provides future art teachers with a knowledge base of the theories and best practices of effective pedagogy for: teaching methods and strategies, diversity, motivational techniques, classroom management, assessment and evaluation methods, and accommodating all students including those with special needs.

0101	Susan Hendricks	Seats (Total: 25)
	Tu 9:00am - 12:00pm	EDU 1315

TLPL437 **Studio Processes and Materials: 3D**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Secondary Educ: Art program; or must be a Pre-Art Education Major. Credit only granted for: EDCI407 or EDCI437. Formerly: EDCI407.

A lecture-studio course to develop skills, material resources, and educational strategies for three-dimensional projects in school settings.

0101	Margaret Walker	Seats (Total: 25)
	MW 9:00am - 11:50am	EDU 1315

TLPL441 **Pedagogy of Teaching English Language Learners**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: EDCI434 or TLPL441. Formerly: EDCI434.

A survey of the historical and current approaches, methods, and techniques of teaching English to speakers of other languages, from grammar translation and audiolingual to communicative and task-based approaches will be presented. Additionally, successful classroom practices that address the needs of culturally diverse and language minority students will be analyzed. Students will have the opportunity to discuss, probe and apply theories and principles to hands-on teaching practices in real-life settings. Digital technologies that assist teaching English language learners (ELLs) will be emphasized as well.

0101	Sarah Moore	Seats (Total: 24)
	TuTh 12:30pm - 1:45pm	EDU 1315

TLPL443 **Understanding Cross-Cultural Communication for Teaching English Language Learners**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Credit only granted for: EDCI436 or TLPL443. Formerly: EDCI436.

Theories of intercultural communication and techniques for applying them in the teaching of English as a second language (ESL) and content classes. Research and evaluation of selected aspects of a culture as basis for creating, selecting and using culturally-responsive teaching materials and methods.

0101	Melinda Martin-Beltran	Seats (Total: 25)
	W 5:00pm - 7:45pm	EDU 1121

TLPL444 **English Grammar Pedagogy for Teachers of English Language Learners**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: EDCI437 or TLPL444. Formerly: EDCI437.

Methods of teaching English grammar to English language learners. The role of teaching grammar. Effective methods and techniques for incorporating grammar in other communication activities.

0101	Drew Fagan, Andres Garcia	Seats (Total: 25)
	MW 2:00pm - 3:15pm	EDU 2121

TLPL452 **Bases for English Language Instruction**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Secondary Educ: English Language Arts program; and minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI417 or TLPL452. Formerly: EDCI417.

Examines current theory, research, best practice, curricula and materials focused on the teaching of English language to native and non-native English learners. Topics include morphology, syntax, semantics, vocabulary, pragmatics, argument, discourse structure, dialects, edited academic English, English language proficiency (listening, speaking, reading, writing) assessment, and instructional planning. English Language Learner (TESOL and SIOP) and special needs (inclusion) pupil issues considered.

0101	Shenika Hankerson	Seats (Total: 30)
	W 5:00pm - 7:45pm	JMZ 0103

TLPL460 **Materials and Instruction for Creating Skilled and Motivated Readers, Part I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be in Elementary Education program; and junior standing or higher. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI461 or TLPL460. Formerly: EDCI461.

Selecting, evaluating, and using a variety of materials and instructional strategies to create skilled and motivated readers in the elementary grades; Topics include emergent literacy, vocabulary development, reading comprehension and oral reading fluency in diverse classroom settings.

Contact department for information to register for this course.

TLPL461 **Materials and Instruction for Creating Skilled and Motivated Readers, Part II**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: TLPL361 and TLPL460. Corequisite: TLPL312, EDCI342, TLPL321, and TLPL362. Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department; and must be in Elementary Education program. Credit only granted for: EDCI462 or TLPL461. Formerly: EDCI462.

Selecting, evaluating, and using a variety of materials to create skilled and motivated readers in the elementary grades, particularly in diverse classroom settings; Topics include word analysis, spelling, writing, reading comprehension strategies, directed reading lessons, and explicit instruction.

Contact department for information to register for this course.

TLPL462 **Reading in the Secondary School**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Minimum cumulative GPA of 2.75; and must be in one of the following programs (Middle School Education; Secondary Educ: Science; Secondary Educ: English Language Arts; Secondary Educ: Mathematics; Secondary Educ: Foreign Languages; Secondary Educ: Social Studies; Secondary Educ: Art) ; and permission of department required for post-baccalaureate students. Credit only granted for: EDCI463 or TLPL462. Formerly: EDCI463.

Provides secondary school teachers with understanding the need for and approaches to teaching students to read and learn from content area texts.

0101	Olivia Saracho Tu 2:00pm - 4:30pm	Seats (Total: 30) JMZ 0103
0201	Olivia Saracho W 2:00pm - 4:30pm	Seats (Total: 30) ASY 3219

TLPL476 **Equity and Pedagogy**

Credits: 2 Grading Method: Regular, Audit

Prerequisite: TLPL475. Corequisite: TLPL424 and EDCI460. Restriction: Minimum cumulative GPA of 2.75; and must be in one of the following programs (Middle School Education; Early Childhood Education; Elementary Education; Secondary Educ: Science; Secondary Educ: English Language Arts; Secondary Educ: Mathematics; Secondary Educ: Foreign Languages; Secondary Educ: Social Studies; Physical Education; Music Education; Secondary Educ: Art; Special Education). Credit only granted for: EDCI425 or TLPL476. Formerly: EDCI425.

An exploration and application of major theoretical frameworks surrounding equity and critical pedagogy. Pedagogical decision making that leads to greater equity and improved student learning for all students. Draws on the concurrent student teaching experience.

0101	Nardos Ghebreab Tu 5:00pm - 7:00pm	Seats (Total: 20) JMZ 1226

TLPL478A **Professional Seminar in Education; Professional Seminar in Education: Art Education**

(Perm req)

Credits: 3 Grading Method: Regular

Seminar on the issues and problems teacher candidates encounter in classrooms. Exploration of the skills and strategies that best address these challenges.

0101	Margaret Walker Contact instructor or department for details.	Seats (Total: 8)

TLPL478B **Professional Seminar in Education; Professional Seminar in Education: Social Studies**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar on the issues and problems teacher candidates encounter in classrooms. Exploration of the skills and strategies that best address these challenges.

0101	Alison Jovanovic M 5:30pm - 7:30pm	Seats (Total: 30) EDU 1121

TLPL478C **Professional Seminar in Education; Professional Seminar in Education: English**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar on the issues and problems teacher candidates encounter in classrooms. Exploration of the skills and strategies that best address these challenges.

0101	Peggy Wilson W 6:15pm - 7:15pm	Seats (Total: 35) Location: TBA

TLPL478D **Professional Seminar in Education; Professional Seminar in Education: Mathematics**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar on the issues and problems teacher candidates encounter in classrooms. Exploration of the skills and strategies that best address these challenges.

0101	Angela Stoltz M 4:00pm - 5:30pm	Seats (Total: 10) PHY 1120

TLPL478G **Professional Seminar in Education; Elementary Education**

Credits: 2 Grading Method: Regular

Seminar on the issues and problems teacher candidates encounter in classrooms. Exploration of the skills and strategies that best address these challenges.

0101	Deborah Lewin Contact instructor or department for details.	Seats (Total: 0)
0201	Brooke Dalesio Contact instructor or department for details.	Seats (Total: 0)
0301	Tracy Dunheimer Contact instructor or department for details.	Seats (Total: 0)

TLPL478K **Professional Seminar in Education; Professional Seminar in Education: Foreign Language**

(Perm req)

Credits: 1 Grading Method: Regular

Seminar on the issues and problems teacher candidates encounter in classrooms. Exploration of the skills and strategies that best address these challenges.

0101	Perla Blejer W 4:30pm - 6:30pm	Seats (Total: 12) EDU 2102

TLPL479G **Field Experiences in Education; Internship**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Field experiences in approved eduation setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Students must pay $135 lab fee.

0101	Lisa Bote F 12:00pm - 2:45pm	Seats (Total: 0) TWS 0320
0201	Lisa Bote F 12:00pm - 2:45pm	Seats (Total: 0) TWS 0320
0301	Lisa Bote F 12:00pm - 2:45pm	Seats (Total: 0) TWS 0320

TLPL481 **Embracing Diversity in the Classroom Community**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Restriction: Admission to teacher education program; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: TLPL481 or EDCI475. Formerly: EDCI475.

An exploration of the richness and complexity of student diversity that teacher candidates will encounter in K-12 classrooms. Students will engage in critical reflection around diversity and equity issues.

0101	Jennifer Burris M 4:15pm - 7:00pm	Seats (Total: 25) ASY 3203

TLPL488B **Special Topics in Education; Teaching Academically, Culturally and Linguistically DiverseStudents in Secondary Education**

(Perm req)

Credits: 2

Grading Method: Regular, Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Christina Budde Tu 5:30pm - 6:45pm	Seats (Total: 30) EDU 2121

TLPL488I **Special Topics in Education; Culturally Responsive Language and Literacy Instruction in Elementary Classrooms**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Margaret Peterson Tu 8:00am - 11:50am	Seats (Total: 0) EDU 3233
0201	Matthew Hurt W 8:00am - 11:50am	Seats (Total: 0) LEF 0135
0301	John O'Flahavan Th 8:00am - 11:50am	Seats (Total: 0) EDU 3236

TLPL488L **Special Topics in Education; Promoting Skilled and Motivated Readers in Elementary Classrooms (Part 1)**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Peter Afflerbach Th 9:00am - 11:45am	Seats (Total: 0) TYD 2108
0201	Tara Johnston Tu 12:30pm - 3:15pm	Seats (Total: 0) EDU 2121
0301	Ayanna Baccus M 12:30pm - 3:15pm	Seats (Total: 0) EDU 1121

TLPL488M **Special Topics in Education; Knowing and Learning**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | General Education: DSHS

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Anita Sanyal	Seats (Total: 20)
	W 4:00pm - 6:50pm	PHY 1120

TLPL488W **Special Topics in Education; Perspectives in Science**

(Perm req)

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Daniel Levin	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	EDU 2102

TLPL489 **Internship in Education**

(Perm req)

Credits: 1-12 | Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Contact department for information to register for this course.

TLPL489A **Internship in Education; Internship in Education: Art**

(Perm req)

Credits: 12 | Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Students must pay a $750.00 lab fee.

0101	Susan Hendricks	Seats (Total: 18)
	Contact instructor or department for details.	

TLPL489B **Internship in Education; Internship in Education: Social Studies/History**

(Perm req)

Credits: 12 | Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Students must pay a $750.00 lab fee.

0101	Alison Jovanovic	Seats (Total: 30)
	Contact instructor or department for details.	

TLPL489C **Internship in Education; Internship in Education: English**

(Perm req)

Credits: 12 Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Students must pay a $750.00 lab fee.

0101	Peggy Wilson	Seats (Total: 25)
	Contact instructor or department for details.	

TLPL489D **Internship in Education; Internship in Education: Mathematics**

(Perm req)

Credits: 12 Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Students must pay a $750.00 lab fee.

0101	Angela Stoltz	Seats (Total: 15)
	Contact instructor or department for details.	

TLPL489E **Internship in Education; Internship in Education: Middle School**

(Perm req)

Credits: 12 Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Students must pay a $750.00 lab fee.

0101	Stacy Currie	Seats (Total: 20)
	Contact instructor or department for details.	

TLPL489F **Internship in Education; Internship in Education: Science**

(Perm req)

Credits: 12 Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Students must pay a $750.00 lab fee.

0101	Tranae Johnson	Seats (Total: 20)
	Contact instructor or department for details.	

TLPL489G **Internship in Education; Internship in Education: Elementary Education Residency**

(Perm req)

Credits: 9 Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Students must pay a $375.00 lab fee.

0101	Deborah Lewin	Seats (Total: 0)
	Contact instructor or department for details.	
0201	Brooke Dalesio	Seats (Total: 0)
	Contact instructor or department for details.	
0301	Tracy Dunheimer	Seats (Total: 0)
	Contact instructor or department for details.	

TLPL489J **Internship in Education; Internship in Education: Foreign Language**

(Perm req)

Credits: 12 Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Students must pay a $750.00 lab fee.

0101	Perla Blejer	Seats (Total: 12)
	Contact instructor or department for details.	

TLPL498 **Special Problems in Education**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Exploration of current problems in teaching, learning, policy and leadership. Available only to students who have definite plans for study of approved problems.

Contact department for information to register for this course.

TLPL607 **Teaching and Learning Mathematics in the Elementary School**

Credits: 3 Grading Method: Regular

Prerequisite: MATH212, MATH213, or MATH214; or students who have taken courses with comparable content may contact the department. Credit only granted for: EDCI652 or TLPL607. Formerly: EDCI652.

Strategies and methodologies for the teaching of elementary school mathematics based on current research and theories about how children learn mathematics. Attention is given to professional recommendations and teaching practices that foster communication, reasoning, and reflection in the mathematics classroom. Internship or other placement in an elementary school is required.

Contact department for information to register for this course.

TLPL612 **Teaching and Learning Algebra in the Middle School**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Admission to M.A. or M.Ed. with concentration in Mathematics Education; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI655 or TLPL612. Formerly: EDCI655.

Designed to enhance middle school mathematics teachers' content and pedagogical knowledge in algebra.

Contact department for information to register for this course.

TLPL620 **Trends in School Curriculum: Science**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI670 or TLPL620. Formerly: EDCI670.

Recent developments in educational thinking and practice on the curriculum in science education.

0101	Kelly Mills	Seats (Total: 25)
	M 4:15pm - 7:00pm	EDU 2212

TLPL627 **Reflection and Practice in Secondary School Science Teaching**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: TLPL626; or permission of instructor. Restriction: Must be in the Maryland Master's Certification program. Credit only granted for: EDCI676 or TLPL627. Formerly: EDCI676.

Use of classroom videotape and student work as data for teachers to analyze their students' thinking and discuss instructional interpretation, strategies, and techniques in the specific contexts of their classes.

Contact department for information to register for this course.

TLPL630 **Trends in Art Education Curriculum**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI600 or TLPL630. Formerly: EDCI600.

Recent developments in art education.

Contact department for information to register for this course.

TLPL636 **Trends in Secondary School Curriculum: English**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI640 or TLPL636. Formerly: EDCI640.

Recent developments in educational thinking and practice on the curriculum in English education.

Contact department for information to register for this course.

TLPL641 **Reading, Cognition, and Instruction: Reading in the Content Areas I**

Credits: 3 Grading Method: Regular

Credit only granted for: EDCI625 or TLPL641. Formerly: EDCI625.

Provides middle and secondary education students with an understanding of the interactive nature of the reading process, the use of research-based instructional strategies, the relationship between vocabulary development and student concept development, the design of strategic reading instruction, the methods for assessing content area literacy, and the ability to plan instruction and communicate with students, parents, and allied professionals.

0101	Ying Alice Zhang Tu 5:30pm - 8:00pm	Seats (Total: 15) EDU 3236

TLPL643 **Assessing Student Learning and Development**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI612 or TLPL643. Formerly: EDCI612.

Prepares experienced teachers to assess student knowledge, strategies and skills over time so that they can design instruction that builds on student strengths and addresses student needs. Teachers will study the purposes of assessment including school and student needs. Teachers will study the purposes of assessment including school and teacher accountability, student placement, course grade assignment and instructional design. They also will explore types of formal and informal assessment, curriculum-based and curriculum-free assessment, external and teacher made assessment.

0101	Peter Afflerbach Th 4:15pm - 7:00pm	Seats (Total: 30) EDU 3233

TLPL645 **Content Area Reading**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDCI362; or TLPL462; or students who have taken courses with comparable content may contact the department. Credit only granted for: EDCI661 or TLPL645. Formerly: EDCI661.

Research-based strategies for improving reading to learn in the content areas (K-12).

0101	Mariam Dreher Tu 5:00pm - 7:45pm	Seats (Total: 25) EDU 2119

TLPL646 **Linguistics in Education**

Credits: 3 Grading Method: Regular

Provides teachers and educational researchers with the theoretical and technical knowledge of linguistics necessary to engage effectively in their fields.

0101	Jeff MacSwan W 5:00pm - 7:45pm	Seats (Total: 25) ASY 3219

TLPL651 **Leadership in Schoolwide Reading Program**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI666 or TLPL651. Formerly: EDCI666.

Preparation of reading personnel to function as resource persons to classroom teachers, administrators and the school community.

0101	Mariam Dreher	Seats (Total: 18)
	W 5:00pm - 7:45pm	EDU 2119

TLPL654 **Clinical Instruction in Reading**

Credits: 3

Grading Method: Regular, Audit

Prerequisite: TLPL653; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI665 or TLPL654. Formerly: EDCI665.

Clinical procedures and materials for reading instruction.

0101	Ayanna Baccus	Seats (Total: 30)
	M 5:00pm - 7:45pm	EDU 2119

TLPL655 **Student Assessment in the Second Language Classroom**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: EDCI631 or TLPL655. Formerly: EDCI631.

Analysis of standardized and teacher-made FL/ESL tests; emphasis on principles of FL/ESL test construction. Field testing of commercial and teacher-made materials.

0101	Kate Mahoney	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

TLPL657 **Teaching for Cross Cultural Communication**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: EDCI633 or TLPL657. Formerly: EDCI633.

Theories of intercultural communication and techniques for applying them in the teaching of English as a second language (ESL) and content classes. Research and evaluation of selected aspects of a culture as basis for creating, selecting and using culturally-responsive teaching materials and methods.

0101	Melinda Martin-Beltran	Seats (Total: 25)
	W 5:00pm - 7:45pm	EDU 1121

TLPL660 **Foundations of Literacy and Biliteracy Development**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: TLPL665. Credit only granted for: EDCI636 or TLPL660. Formerly: EDCI636.

An overview of the research on literacy and biliteracy development for English learners. Specifically, the course explores the theoretical models and processes of teaching reading and writing, current literacy/biliteracy issues, assessment, and strategies for developing literacy and biliteracy skills for English learners.

0101	Shenika Hankerson	Seats (Total: 15)
	M 5:00pm - 7:45pm	EDU 3236

TLPL662 **Second Language Acquisition**

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI732 or TLPL662. Formerly: EDCI732.

Major theoretical approaches to second language acquisition. For teaching English to speakers of other languages (TESOL).

0101	Kellie Rolstad	Seats (Total: 25)
	Th 5:00pm - 7:45pm	EDU 2119

TLPL663 **Practice and Theory in Teaching Second Language Learners**

Credits: 3 Grading Method: Regular, Audit

Corequisite: EDCI637 or EDCI689; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI613 or TLPL663. Formerly: EDCI613.

Focuses on issues that arise while teaching second language (ESOL or foreign language) learners. Supports implementation of theory into practice and research-based best practices during teaching internship, and completion of teaching portfolio during a second field experience.

0101	Tabitha Kidwell	Seats (Total: 10)
	M 5:00pm - 7:45pm	ASY 3217

TLPL672 **Impact Evaluation for Education and Public Policy**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Knowledge of multivariate regression and prior experience with statistical programming software (e.g., Stata). Credit only granted for: TLPL672 or EDPS621. Formerly: EDPS621.

Students will learn about and practice using a variety of quantitative research methods that allow for causal inferences and can be applied to estimate the impact of policies or programs in education and other policy sectors.

0101	David Blazar	Seats (Total: 20)
	W 1:00pm - 3:45pm	WDS 0104

TLPL674 **Studying Student Learning in Diverse Settings**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI611 or TLPL674. Formerly: EDCI611.

This course deepens teacher understanding of student development and th cultural context for teaching through readings and focused field studies. Participants will also begin developing skills needed for investigations using methods of interpretive inquiry.

Contact department for information to register for this course.

TLPL675 **Embracing Diversity in Classroom Communities**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI697 or TLPL675. Formerly: EDCI697.

The course aims to help students understand race, class, gender, and sexuality as systems of privilege, exclusion, marginalization, and the centrality of embracing diversity in the classroom communities to promote the success of all students.

Contact department for information to register for this course.

TLPL678 **Professional Seminar in Education**

Credits: 1-3 Grading Method: Regular, Audit

Seminar on the issues and problems teacher candidates encounter in classrooms. Exploration of the skills and strategies that best address these challenges.

Contact department for information to register for this course.

TLPL682 **Philosophy of Education**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDPS612 or TLPL682. Formerly: EDPS612.

A study of the great educational philosophers and systems of thought affecting the development of modern education, with particular emphasis on recent scholarship on philosophical problems in education.

0101	Campbell Scribner	Seats (Total: 20)
	Tu 7:15pm - 10:00pm	EDU 1121

TLPL684 **Trends in Secondary School Curriculum: Social Studies**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI620 or TLPL684. Formerly: EDCI620.

Recent developments in educational thinking and practice on the curriculum in social studies.

Contact department for information to register for this course.

TLPL687 **Politics of Education**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDPS614 or TLPL687. Formerly: EDPL614.

Educational institutions as political entities. Focuses on conceptual perspectives for examining political dynamics in governmental and organizational contexts. Provides opportunities to carry out original case studies of policy making processes at various levels of the education policy system.

0101	Betty Malen	Seats (Total: 20)
	Th 4:15pm - 7:00pm	EDU 1107

TLPL688D **Special Topics in Education; ELL Language Variation**

Credits: 1 Grading Method: Regular, Audit

Special treatment of current topics and issues in teaching, learning, policy and leadership.

Contact department for information to register for this course.

TLPL688E **Special Topics in Education; Digital Learning Tools and Communities**

Credits: 1 Grading Method: Regular, Audit

Special treatment of current topics and issues in teaching, learning, policy and leadership.

Contact department for information to register for this course.

TLPL688M **Special Topics in Education; Mathematics in the Secondary Classroom**

Credits: 3 Grading Method: Regular, Audit

Special treatment of current topics and issues in teaching, learning, policy and leadership.

Contact department for information to register for this course.

TLPL689 **Internship in Education; Teaching Internship**

(Perm req)

Credits: 1-9 Grading Method: Regular, Audit

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

0101	Perla Blejer Contact instructor or department for details.	Seats (Total: 5)
0201	Loren Jones Contact instructor or department for details.	Seats (Total: 5)

TLPL691 **Research Methods**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI685 or TLPL691. Formerly: EDCI685.

The interpretation and conduct of research relevant to curriculum, teaching and learning.

0101	Wayne Slater	Seats (Total: 25)
	Th 5:00pm - 7:45pm	EDU 2121

TLPL698 **Conducting Research on Teaching; Conducting Research on Teaching**

(Perm req)

Credits: 1-3 Grading Method: Regular

Analysis and improvement of educational practice. Research methods used in the study of classroom teaching. Design and conduct of an action research project. Open only to students admitted to approved teacher education programs.

0101	Saroja Warner	Seats (Total: 10)
	Contact instructor or department for details.	
	Contact department or instructor for details.	

TLPL699 **Master's Seminar**

Credits: 3 Grading Method: Regular, Audit

Directed study for master's degree students writing seminar papers.

Contact department for information to register for this course.

TLPL712 **Foundations of Mathematics Education III: Curriculum**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Admitted to Mathematics Education Doctoral Program; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI753 or TLPL712. Formerly: EDCI753.

The study of curriculum in mathematics and research on curriculum. The relationship of mathematics and school mathematics; the forms, purposes,development, and evaluation of mathematics curricula.

0101	Daniel Chazan	Seats (Total: 20)
	W 1:00pm - 3:45pm	EDU 2102

TLPL728 **Research Seminar in Mathematics and Science Education**

(Perm req)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Read, plan, conduct, and report on research projects and research topics in mathematics and science education. Projects may be faculty/student projects, or group or individual student projects (may or may not be related to a dissertation). Emphasis on framing researchable questions and designing/analyzing research studies. Faculty and peer feedback and interaction are crucial expectations.

0101	Andrew Brantlinger	Seats (Total: 25)
	F 9:00am - 11:00am	EDU 2121

TLPL730 **Theory and Research in English Education**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI740 or TLPL730. Formerly: EDCI740.

A survey of the research literature; evaluation of research techniques; consideration of relevant instructional curriculum theory; evaluation of modern teaching methods and techniques.

0101	Wayne Slater	Seats (Total: 20)
	M 4:30pm - 7:45pm	ASY 3221

TLPL744 **Research Foundations of Second Language Education: Examining Linguistically Diverse Student Learning**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: TLPL664 or TLPL662; and permission of EDUC-Teaching and Learning, Policy and Leadership department. Or permission of instructor. Credit only granted for: EDCI735 or TLPL744. Formerly: EDCI735.

Critically examine theories of second language acquisition and research in applied linguistics relevant to linguistically diverse students and learners of English as an additional language. Analysis of research from linguistic, psycholinguistic, sociolinguistic and sociocultural perspectives, with an emphasis on the social contexts of second language learning and teaching.

0101	Melinda Martin-Beltran	Seats (Total: 20)
	W 1:00pm - 3:45pm	TWS 1313

TLPL770 **Black and Latino Education: History and Policy**

Credits: 3 Grading Method: Regular, Audit

Recommended: EDCI776; and completion of EDSP611 recommended. Credit only granted for: EDCI786 or TLPL770. Formerly: EDCI786.

Examination of the historical legacies and contemporary policies that have contributed to the educational status (K-20) of Blacks and Latinos in the United States from the 19th century to the present. Issues surrounding language, immigration, racism, social class, and state and federal policies will also be analyzed.

0101	Taharee Jackson	Seats (Total: 20)
	Tu 7:15pm - 10:00pm	EDU 1315

TLPL788C **Special Topics in Education; Literacy for Quantitative Methods**

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Claudia Galindo	Seats (Total: 20)
	W 4:15pm - 7:00pm	EDU 3315

TLPL788F **Special Topics in Education; Policy and Politics of Education Reform**

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Alisha Butler, Betty Malen	Seats (Total: 24)
	Tu 4:15pm - 7:00pm	EDU 1315

TLPL788G **Special Topics in Education; Education, Society & Democracy: Critical Perspectives**

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Claudia Galindo	Seats (Total: 20)
	M 4:15pm - 7:00pm	EDU 2101

TLPL788K **Special Topics in Education; Seminar in Teaching and Supervision**

Credits: 1 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

This course meets bi-weekly, starting January 29th

0101	Colleen Gannon Tu 1:00pm - 3:00pm	Seats (Total: 15) JMZ 3122

TLPL788N **Special Topics in Education; School Exclusion: Policy, Practice and Prevention**

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Tara Brown Th 7:15pm - 10:00pm	Seats (Total: 20) EDU 1107

TLPL788T **Special Topics in Education; Research Seminar in Technology, Learning, and Leadership**

Credits: 1 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	David Weintrop W 4:00pm - 4:50pm	Seats (Total: 10) EDU 1121

TLPL788V **Special Topics in Education; Research and Technology**

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	David Weintrop W 12:00pm - 2:45pm	Seats (Total: 15) JMZ 0205

TLPL788W **Special Topics in Education; MA Core: Research Methodologies and Educational Practice**

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Daniel Levin M 4:15pm - 7:00pm	Seats (Total: 20) EDU 2121

TLPL789 **Internship in Education**

Credits: 1-3 Grading Method: Sat-Fail

Approved professional experiences with appropriate supervision. Open only to students admitted to approved master's and doctoral specializations.

Contact department for information to register for this course.

TLPL792 **Qualitative Research II: Analysis and Interpretation of Data**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: TLPL791. Credit only granted for: TLPL792 or EDCI792. Formerly: EDCI792.

Considers methods of on-going data analysis, ways of knowing and writing about field research, issues of reflexivity, and the ethical and political decisions involved in crafting text. Students read literature on and exemplars of multiple modes of qualitative data analysis and interpretation.

0101	Tara Brown Th 4:15pm - 7:00pm	Seats (Total: 20) EDU 0220

TLPL793 **Methods of Discourse Analysis**

Credits: 3 Grading Method: Regular

Credit only granted for: EDCI788B or TLPL793. Formerly: EDCI788B.

Surveys the various theoretical and methodological frameworks for doing discourse analytic investigations across disciplines.

0101	Marissa Fond Th 1:00pm - 3:45pm	Seats (Total: 25) EDU 2121

TLPL795 **Foundations of Educational Research II**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Teaching and Learning, Policy and Leadership (Doctoral) program. Credit only granted for: EDPS788T or TLPL795. Formerly: EDPS788T.

Students engage in the process of conceptualizing and completing a rigorous review of a section of literature in their area of specialization.

0101	Diane Ketelhut Th 4:15pm - 7:00pm	Seats (Total: 25) EDU 1315

TLPL798 **Special Problems in Education**

(Perm req)

Credits: 1-6

Grading Method: Regular, Audit

Exploration of current problems in teaching, learning, policy and leadership. Available only to master's or doctoral candidates under the direction of their advisors.

Contact department for information to register for this course.

TLPL798B **Special Problems in Education; Political Context for Teacher Education**

Credits: 1

Grading Method: Regular, Audit

Exploration of current problems in teaching, learning, policy and leadership. Available only to master's or doctoral candidates under the direction of their advisors.

This course meets the first Wednesday of the month from February to May

0101	David Imig	Seats (Total: 15)
	W 11:15am - 2:40pm	EDU 2212A

TLPL799 **Master's Thesis Research**

(Perm req)

Credits: 1-6

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

TLPL840 **Seminar in Reading Education**

Credits: 3

Grading Method: Regular, Audit

Credit only granted for: EDCI860 or TLPL840. Formerly: EDCI860.

0101	Jennifer Turner	Seats (Total: 20)
	M 1:00pm - 3:45pm	EDU 2102

TLPL888 **Apprenticeship in Education**

(Perm req)

Credits: 1-8

Grading Method: Regular, Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

Contact department for information to register for this course.

TLPL889 **Internship in Education**

(Perm req)

Credits: 3-8 Grading Method: Regular, Audit

Internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Contact department for information to register for this course.

TLPL898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

TLPL899 **Doctoral Dissertation Research**

(Perm req)

Credits: 1-8 Grading Method: Regular, Sat-Fail

Registration required to the extent of 6-9 hours for an Ed.D. Project and 12-18 hours for a Ph.D. Dissertation.

Contact department for information to register for this course.

TLTC Teaching and Learning Transformation Center Spring 2019

TLTC333 **Fundamentals of Academic Peer Mentoring**

(Perm req)

Credits: 1 Grading Method: Regular

Restriction: Permission of TLTC required - enrollment restriction.

How should scientific research influence the way we study and advance the academic performance of others? Learn about the scholarship of teaching and learning and develop the applied skills to support active learning as an academic peer mentor. Whether or not you ultimately pursue a career as an educator, the more effectively you can coach and support the performance of other people, and the more successful you will be. Guided online and face-to-face participation will culminate in a portfolio of your teaching activities and professional development.

Click here for more course information.

0101	Alexis Williams	Seats (Total: 50)
	Class time/details on ELMs Tu 10:00am - 10:50am	ONLINE Location: TBA
	This section will meet in person on the following dates in ESJ 0201; February 19, March 12, April 2, and April 23.	

0102	Alexis Williams Class time/details on ELMs Tu 2:00pm - 2:50pm	Seats (Total: 50) ONLINE Location: TBA
	This section will meet in person on the following dates in ESJ 0201; February 19, March 12, April 2, and April 23.	
0103	Alexis Williams Class time/details on ELMs Tu 5:00pm - 5:50pm	Seats (Total: 50) ONLINE Location: TBA
	This section will meet in person on the following dates in ESJ 0201; February 19, March 12, April 2, and April 23.	
0201	Alexis Williams Class time/details on ELMs F 1:00pm - 1:50pm	Seats (Total: 50) ONLINE Location: TBA
	This section will meet in person on the following dates in ESJ 0201; February 22, March 15, April 5, and April 26.	
0202	Alexis Williams Class time/details on ELMs F 4:00pm - 4:50pm	Seats (Total: 50) ONLINE Location: TBA
	This section will meet in person on the following dates in ESJ 0201; February 22, March 15, April 5, and April 26.	

TLTC399 **Independent Study in Academic Peer Mentoring**

(Perm req)

Credits: 1-3 Grading Method: Regular

Earn academic credit for the time spent supporting a course in TLTC's Academic Peer Mentoring Program (AMP).

Prerequisite: Must have completed or be concurrently enrolled in TLTC333. Restriction: Permission of TLTC required - enrollment restriction. Repeatable to 6 credits. Earn academic credit for the time spent supporting a course in TLTC's Academic Peer Mentoring Program (AMP).

Contact department for information to register for this course.

TLTC699A **Special Topics in University Teaching and Learning**

Credits: 1 Grading Method: Sat-Fail

Special topics courses for graduate students interested in university teaching and learning.

0101	Linda Macri, Jade Olson	Seats (Total: 12)
	Contact instructor or department for details.	

TLTC798 **University Teaching and Learning**

(Perm req)

Credits: 1-2 Grading Method: Regular

Special topic courses directed at experienced graduate teaching assistants who are interested in university teaching and learning issues. Can be used by students for participation in the Universtiy Teaching and Learning Program.

Restriction: Permission of TLTC-Teaching and Learning Transformation Center. Repeatable to 6 credits if content differs. Formerly: UNIV798. Special topic courses directed at experienced graduate teaching assistants who are interested in university teaching and learning issues. Can be used by students for participation in the University Teaching and Learning Program.

0101	Marissa Stewart	Seats (Total: 20)
	Tu 2:00pm - 4:00pm	ESJ 1103

UMEI Maryland English Institute Spring 2019

International students on F1 visas must maintain a full-time status. Full-time status for undergraduate students will be based on registration for 12 or more semester hours, for graduate students, it is a combination of courses equivalent to 48 units per semester. Registration in UMEI001-004 is equivalent to full-time study. Those enrolled in these courses are not permitted to enroll in any other course work. For further information on what constitutes full-time status, please see: http://www.testudo.umd.edu/soc/fulltime.html. UMEI courses do not carry credit toward any degree at the University and do not count in the retention plan. Additional fees are required for these courses. For more information, see the financial section in the Registration Guide.

UMEI001 **English as a Foreign Language: Beginning**

(Perm req)

Credits: 12 Grading Method: Sat-Fail

Restriction: Permission of EDUC-Dean-Maryland English Institute department.

Intensive course for the non-native speaker of English who has little or no previous knowledge of English. Focus on the rapid acquisition of the basic features of English grammar and pronunciation and on speaking and understanding American English; reading and writing appropriate to the level will be included. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0101	Christopher Vizcarrondo, Caralyn Bushey	Seats (Total: 16)
	MTuWThF 9:00am - 11:50am	HBK 1112
	MTuWThF 1:00pm - 2:50pm	HBK 1112

UMEI002 **English as a Foreign Language: Intermediate I**

(Perm req)

Credits: 12 Grading Method: Sat-Fail

Restriction: Permission of EDUC-Dean-Maryland English Institute department.

Intensive course for the non-native speaker of English who has had some previous instruction in English. Emphasis on improving listening and speaking skills, on mastering intermediate grammatical structures, and on expanding vocabulary. Includes practice in reading and writing appropriate to the level. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0101	Christopher Vizcarrondo, Caralyn Bushey	Seats (Total: 16)
	MTuWThF 9:00am - 11:50am	HBK 1112
	MTuWThF 1:00pm - 2:50pm	HBK 1112

UMEI003 **English as a Foreign Language: Intermediate II**

(Perm req)

Credits: 12 Grading Method: Sat-Fail

Restriction: Permission of EDUC-Dean-Maryland English Institute department.

Intensive course for the non-native speaker of English who has mastered the essential structures of English grammar. Emphasis on improving communicative skills for a wide range of linguistic situations, on rapid expansion of vocabulary, and on improving reading comprehension and basic writing skills. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0101	Dee Broughton, Caralyn Bushey	Seats (Total: 16)
	MTuWThF 9:00am - 11:50am	SQH 2113
	MTuWThF 1:00pm - 2:50pm	SQH 2113

UMEI004 **English as a Foreign Language: Intermediate III**

(Perm req)

Credits: 12 Grading Method: Sat-Fail

Restriction: Permission of EDUC-Dean-Maryland English Institute department.

Intensive course for the non-native speaker of English who has a good command of the basic features of spoken and written English. Emphasis on refining speaking and listening skills, on improving reading speed and comprehension of academic texts, and on developing writing skills for academic courses. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0101	Caroline Thompson, Lori Fredricks	Seats (Total: 16)
	MTuWThF 9:00am - 11:50am MTuWThF 1:00pm - 2:50pm	COL 3110 COL 3110
0301	Louise Godley, Eric Walker	Seats (Total: 16)
	MTuWThF 9:00am - 11:50am MTuWThF 1:00pm - 2:50pm	COL 3109 COL 3109

UMEI005 **Advanced English as a Foreign Language**

Credits: 6 Grading Method: Sat-Fail, Audit

Semi-intensive course for the nearly proficient non-native speaker of English needing additional language instruction prior to undertaking full-time academic study. Speaking and listening skills; improvement of reading speed and comprehension; and development of writing skills. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0101	Eda Aladagli Yoon	Seats (Total: 12)
	MF 10:00am - 11:50am TuTh 10:00am - 11:50am	TYD 2108 PHY 4222
	This section is restricted to Graduate Students.	
0201	Marilena Draganescu	Seats (Total: 12)
	MTuThF 9:00am - 10:50am	JMZ 3118
	This section is restricted to Undergraduate Students.	
0601	Eric Walker	Seats (Total: 12)
	MTuThF 1:00pm - 2:50pm	JMZ 1123
	Restricted to Undergraduate students.	

UMEI006 **English Pronunciation**

Credits: 2 Grading Method: Sat-Fail, Audit

Restriction: Must have graduate standing.

Individualized class for the non-native speaker of English. Diagnosis of individual pronunciation problems. Practice in the correct pronunciation of English sounds and improvement of ability to speak English with proper stress and intonation patterns. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0201	Charles Duquette MW 9:00am - 10:30am	Seats (Total: 15) ATL 2416

UMEI007 **Advanced Writing for International Students**

Credits: 3 Grading Method: Sat-Fail, Audit

Restriction: Must have graduate standing.

A writing skills course for the non-native speaker of English with a good command of spoken English. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0101	Cornell Brellenthin TuTh 6:00pm - 7:50pm	Seats (Total: 12) SQH 1125
0201	Annelies Galletta TuTh 9:00am - 10:50am	Seats (Total: 12) HBK 0125
0301	Heather Mehrtens TuTh 6:00pm - 7:50pm	Seats (Total: 12) COL 3109
0401	Eda Aladagli Yoon TuTh 12:00pm - 1:50pm	Seats (Total: 12) ITV 1111
0601	Raymond Smith MW 1:00pm - 2:50pm	Seats (Total: 12) SQH 1125
0901	Charles Duquette TuTh 9:00am - 10:50am	Seats (Total: 12) JMZ 1117
1001	Annelies Galletta TuTh 11:00am - 12:50pm	Seats (Total: 12) EGR 3111
1101	Heather Mehrtens Tu 1:00pm - 2:50pm Th 1:00pm - 2:50pm	Seats (Total: 12) CHM 0127 TYD 2108
1201	Heather Mehrtens MW 9:00am - 10:50am	Seats (Total: 12) ATL 2316

1301	Marilena Draganescu TuTh 11:00am - 12:50pm	Seats (Total: 12) JMZ 3122
1401	Lori Fredricks MW 9:00am - 10:50am	Seats (Total: 12) WDS 1131
1501	Lori Fredricks TuTh 9:00am - 10:50am	Seats (Total: 12) WDS 1131

UNIV University Courses Spring 2019

UNIV099 **Internship Seminar**

(Perm req)

Credits: 0 Grading Method: Sat-Fail

Complements students' supervised work experiences. Open to all majors; all class levels. Involves exploring career options, developing professional work skills, examining the relationship between internship and academic coursework. Course may be repeated.

Restriction: Must have earned a minimum cumulative GPA of 2.0 (undergraduates) or 3.0 (graduate students); and Permission of the Career Center; and permission of instructor.

0101	Maria Bowman, Erica Ely Contact instructor or department for details.	Seats (Total: 50)

UNIV100 **The Student in the University**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: EDCP108O or UNIV100. Formerly: EDCP108O.

Introduces students to University life. In a small classroom setting, students will explore how to successfully bridge the gap between high school and college. Study skills, career decision-making, and student development processes will be explored.

0101	TC Lloyd M 3:00pm - 4:50pm *Restricted to First Semester BSOS Students.*	Seats (Total: 15) KEY 0124
0102	Kenneth Kokason Th 2:00pm - 3:50pm *Restricted to First Semester BSOS Students.*	Seats (Total: 15) JMZ 2120

0801	Thomas Steen M 3:00pm - 4:50pm *Restricted to First Semester Letters and Sciences Students.*	Seats (Total: 20) PLS 1113	

UNIV106 **The Transfer Student in the University**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Must be a first-semester Letters and Sciences transfer student. Credit only granted for: UNIV106 or EDCP108G.

For transfer students in Letters and Sciences. This course is designed to assist students in making a successful transition to the University of Maryland (UMD) and to serve as an extended orientation to campus living and learning.

0101	Jeffrey Kodis Tu 2:00pm - 3:15pm	Seats (Total: 20) EGR 3114	
0102	JV Sapinoso Th 11:00am - 12:15pm	Seats (Total: 19) ARC 1125	
0103	Melissa Hyre W 3:00pm - 4:15pm	Seats (Total: 20) JMZ 0120	

UNIV107 **Science Technology Engineering Mathematics Colloquium**

Credits: 1 Grading Method: Regular

Restriction: Must be a current student in Letters & Sciences.

For students interested in pursuing a STEM related major. Introduces students to the fundamentals of career and major exploration and career development within the various disciplines of STEM.

0807	Marchelle Payne-Gassaway **Meets January 30, 2019 - April 18, 2019** W 3:00pm - 3:50pm M 3:00pm - 3:50pm	Seats (Total: 20) EGR 0108 JMZ 1226	Discussion
0811	Suzanne Ashour-Bailey **Meets January 30, 2019 - April 18, 2019** W 3:00pm - 3:50pm M 3:00pm - 3:50pm	Seats (Total: 20) EGR 0108 PLS 1164	Discussion

UNIV108 **Business Exploration Series Colloquium**

Credits: 1 Grading Method: Regular

For students interested in pursuing a business career. Students learn the fundamentals of career development and what the internship/job search process entails.

Restriction: Must be a current student in Letters and Science. For students interested in pursuing a business career. Students learn the fundamentals of career development and what the internship/job search process entails.

0162	Ruth Morris, Lisa Scheeler M 4:00pm - 4:50pm W 3:00pm - 3:50pm	Seats (Total: 23) MMH 1400 HBK 0125	Discussion
0163	Lisa Scheeler, Ruth Morris M 4:00pm - 4:50pm W 4:00pm - 4:50pm	Seats (Total: 23) MMH 1400 HBK 0125	Discussion
0164	Lisa Scheeler, Ruth Morris M 4:00pm - 4:50pm Th 2:00pm - 2:50pm	Seats (Total: 23) MMH 1400 PLS 1119	Discussion
0165	Ruth Morris, Lisa Scheeler M 4:00pm - 4:50pm Tu 4:00pm - 4:50pm	Seats (Total: 23) MMH 1400 HBK 0123	Discussion

UNIV190 **National Scholarships for International Goals**

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Restriction: Freshman or Sophomore Standing.

Prepares first and second-year students with international interests such as study abroad, language learning, and international careers to apply for nationally competitive scholarships. It will help students focus their interests to make choices during their time at UMD that will aid them in their academic, internship, or career pursuits.

0101	Leslie Brice M 4:00pm - 4:50pm	Seats (Total: 20) ESJ 1309	

UNIV269 **Connecting Across Cultures**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVCC

An examination of culture to guide study abroad students through the stages of cross cultural adjustment and to promote cultural competency by providing the motivation, knowledge and skills necessary to work with diverse individuals and teams.

Contact department for information to register for this course.

UNIV269A **Connecting Across Cultures; Cultural Realities of Spain**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit | General Education: DVCC

An examination of culture to guide study abroad students through the stages of cross cultural adjustment and to promote cultural competency by providing the motivation, knowledge and skills necessary to work with diverse individuals and teams.

Contact department for information to register for this course.

UNIV326 **Beyond the Classroom Seminar II**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Prerequisite: UNIV325. Restriction: Must be in the Beyond the Classroom (BTC) living and learning program.

Seminar for students in internships and service-learning experiences as context for applying communication skills and knowledge of civic engagement leadership skills first introduced in UNIV325. Must be taken concurrently with experiential learning practicum.

0101	James Riker	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

UNIV378 **Beyond the Classroom Experiential Learning; Internship Experiences/Experiential Learning**

Credits: 1-3 | Grading Method: Regular, Pass-Fail, Audit

This is the internship component of the Beyond the Classroom program in which students hold internships at organizations such as governmental units and non-profit agencies.

Restriction: For students in the Beyond the Classroom (BTC) living and learning program.

0101	James Riker	Seats (Total: 40)
	Contact instructor or department for details.	

UNIV389A **Special Topics in Undergraduate Studies; Army ROTC Independent Study Projects**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Courses will focus on interdisciplinary topics and will be planned in cooperation with Undergraduate Studies.

0101	Heather Hunkus Contact instructor or department for details.	Seats (Total: 10)
0102	Alama Rush Contact instructor or department for details.	Seats (Total: 10)
0103	Larry Rentz Contact instructor or department for details.	Seats (Total: 10)

UNIV389G **Special Topics in Undergraduate Studies; Solving Converging Global Crises: The Role of the United Nations and Civil Society in Advancing Global Governance**

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Courses will focus on interdisciplinary topics and will be planned in cooperation with Undergraduate Studies.

0101	James Riker Th 3:30pm - 6:15pm	Seats (Total: 15) SCC 1102

UNIV389J **Special Topics in Undergraduate Studies; Federal Independent Study Projects**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

Courses will focus on interdisciplinary topics and will be planned in cooperation with Undergraduate Studies.

0101	Nazanine Beyranvand, Joan Burton Contact instructor or department for details.	Seats (Total: 25)

UNIV389K **Special Topics in Undergraduate Studies; Special Topics in Experiential Learning Global Semester**

(Perm req)

Credits: 3

Grading Method: Regular, Pass-Fail

Courses will focus on interdisciplinary topics and will be planned in cooperation with Undergraduate Studies.

0101	Starsky Cheng, Joan Burton, Jayakumar Arasan Contact instructor or department for details.	Seats (Total: 38)
0201	Starsky Cheng, Jayakumar Arasan, Joan Burton Contact instructor or department for details.	Seats (Total: 38)

UNIV389L **Special Topics in Undergraduate Studies; BTC Seminar III, Civic Leadership for Community Engagement**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Courses will focus on interdisciplinary topics and will be planned in cooperation with Undergraduate Studies.

Prerequisite: UNIV325 and UNIV326, for advanced students in the Beyond the Classroom (BTC) Living and Learning Program. This multi-disciplinary seminar enables students to develop their leadership skills by working collaboratively with their peers on joint projects to enhance and to deepen civic engagement and constructive social change on key civic issues on campus and in the broader community on local, national and global issues. Students will carry out collaborative community-based research that addresses an important civic issue and advances civic knowledge for solving that issue. Students will write a research paper (BTC monograph) and contribute to a joint professional report. The seminar will culminate in a BTC civic education or showcase event (e.g., public forum, conference, hearing, video presentation, etc.) where students will share their findings with the broader campus and members of the relevant community.

0101	James Riker Contact instructor or department for details.	Seats (Total: 20)

UNIV399 **Experiential Learning in Undergraduate Studies**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Experiential learning offered in conjunction with certain designated Office of Undergraduate Studies programs.

0101	Joan Burton, Nazanine Beyranvand Contact instructor or department for details.	Seats (Total: 10)

UNIV399P **Experiential Learning in Undergraduate Studies; People Power -- Activism for Social Change**

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Experiential learning offered in conjunction with certain designated Office of Undergraduate Studies programs.

0101	James Riker	Seats (Total: 56)
	M 7:00pm - 9:00pm	SCC 1102

URSP Urban Studies and Planning Spring 2019

URSP399I **Independent Study**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Directed research and study of selected aspects of urban affairs.

Contact department for information to register for this course.

URSP600 **Research Design and Application**

Credits: 3 Grading Method: Regular

Formerly: URSP602.

Techniques in urban research, policy analysis, and planning. Survey of descriptive and normative models. Objective and subjective measurements. Emphasis on assumptions of research.

0101	Louis Thomas	Seats (Total: 25)
	M 7:00pm - 9:40pm	ARC 1105

URSP601 **Research Methods**

Credits: 3 Grading Method: Regular, Audit

Recommended: An undergraduate-level statistics course; and familiarity with Microsoft Excel. Formerly: URBS601.

Use of measurement, statistics, quantitative analysis, and micro-computers in urban studies and planning.

0101	Chengri Ding	Seats (Total: 15)
	Th 4:00pm - 6:40pm	ARC 1127

URSP604 **The Planning Process**

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: URSP604, URBS656, or URBS604. Formerly: URBS604.

Legal framework for U.S. planning; approaches to the planning process; tools and technology; systems thinking; defining problems and issues; soliciting goals and values; developing and making good presentations; public participation; developing and evaluating alternatives and scenarios; plan evaluation; developing RFPs.

0101	Clive Graham	Seats (Total: 20)
	Tu 4:00pm - 6:40pm	ARC 1105

URSP606 **Planning Economics**

Credits: 3 Grading Method: Regular

Restriction: Must not have completed URSP630. Credit only granted for: URSP606, URBS606, or URBS630. Formerly: URBS606.

Resource allocation in a market economy, the nature of market failures, and the justifications for public sector intervention. The limits and possibilities for planning in a market economy.

0101	Chengri Ding	Seats (Total: 19)
	M 4:00pm - 6:30pm	ARC 1119

URSP631 **Transportation and Land Use**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: URSP631 or URSP688L. Formerly: URSP688L.

The interrelationship between transportation and land use. What are the impacts of various transportation modes on land use patterns, and how can land use solutions influence travel demand. The integration of transportation into master planning and site impact analysis. Using quantitative methods to understand the land use and transportation linkage.

0101	Hiroyuki Iseki	Seats (Total: 19)
	W 4:00pm - 6:40pm	ARC 1119

URSP640 **Growth Management and Environmental Planning**

Credits: 3 Grading Method: Regular, Audit

Topics associated with growth management, defined as policies and strategies by which governments attempted to control the amount, location, pace, pattern and quality of development within their jurisdictions.

0101	Royce Hanson M 1:00pm - 3:40pm	Seats (Total: 25) ARC 1119

URSP661 **City and Regional Economic Development Planning**

Credits: 3 Grading Method: Regular, Audit

Prerequisite: URSP606 or URSP660. Credit only granted for: URSP661, URBS440, or URBS661. Formerly: URBS661.

Spatial patterns of employment and populations, and models of urban and regional growth and decline. Focus on application of economic theory and urban planning techniques to issues of local economic development and planning.

0101	Christopher Dempwolf W 7:00pm - 9:40pm	Seats (Total: 19) ARC 1119

URSP673 **Community Development**

Credits: 3 Grading Method: Regular, Audit

Examines and identifies planning approaches and methods that can help communities - particularly low income communities - become stronger, more cohesive, and more capable of serving their interests. Examines urban poverty; urban politics; history, concepts and practice of community development; and community development approaches and methods.

0101	Nicholas Finio M 4:00pm - 6:40pm	Seats (Total: 25) ARC 1117

URSP688B **Recent Developments in Urban Studies; Urban Infrastructure and Public Works Planning**

Credits: 3 Grading Method: Regular, Audit

Examination of selected current aspects of urban affairs and planning, including, for example, in the United States or neighborhood preservation in Russia. Location of course may be off-campus.

This course aims to introduce the range of infrastructure systems (e.g., water/sewer, energy, technology, telecommunications, transportation, community facilities, etc.) that serve urban development and the basics of how to develop an infrastructure plan, program, or project from the perspective of a practicing planner. We will also explore public works as the process by which infrastructure related services are usually provided to communities by way of local municipalities

0101	Marccus Hendricks	Seats (Total: 25)
	M 7:00pm - 9:40pm	ARC 1103

URSP688D **Recent Developments in Urban Studies; Scenario Planning Workshop**

(Perm req)

Credits: 3

Grading Method: Regular, Audit

Examination of selected current aspects of urban affairs and planning, including, for example, in the United States or neighborhood preservation in Russia. Location of course may be off-campus.

0101	Uri Avin	Seats (Total: 10)
	Contact instructor or department for details.	

URSP688M **Recent Developments in Urban Studies; Intermediate Geographic Information Systems**

Credits: 3

Grading Method: Regular, Audit

Examination of selected current aspects of urban affairs and planning, including, for example, in the United States or neighborhood preservation in Russia. Location of course may be off-campus.

0101	Hiroyuki Iseki	Seats (Total: 20)
	Th 4:00pm - 6:40pm	ARC 0111

URSP688O **Recent Developments in Urban Studies; US Housing Policy & Planning**

Credits: 3

Grading Method: Regular, Audit

Examination of selected current aspects of urban affairs and planning, including, for example, in the United States or neighborhood preservation in Russia. Location of course may be off-campus.

0101	Casey Dawkins	Seats (Total: 15)
	W 4:00pm - 6:40pm	ARC 1117

URSP688Y **Recent Developments in Urban Studies; Smart Cities and Urban Data Science**

Credits: 3

Grading Method: Regular, Audit

Examination of selected current aspects of urban affairs and planning, including, for example, in the United States or neighborhood preservation in Russia. Location of course may be off-campus.

Also offered as URSP688Y. Credit granted for URSP688Y or INST728G. The proliferation of data, technology and new analytical methods are changing cities in rapid and dramatic fashion. These changes have implications for the look and feel of cities, the behavior patterns of the people who inhabit them, and the decisions made by people who govern them. As cities become smarter, our understanding of them must evolve in a similar fashion. This course will introduce students to the concept of Smart Cities and their implications for the current and future development of urban areas. Students will learn about the history of urban development and when cities gained their sentience, how cities learn and grow their intelligence, and how these trends shape the lives of urban and rural dwellers alike. The course begins by introducing the "components" of the smart city: new and novel data sources (embedded sensor networks, crowdsourcing), new methods of (connected devices, machine learning, data science), and new ways of modeling, simulating, and visualizing urban phenomena. The second half of the course discusses how these components are changing the performance and experience of different aspects of urban life inareas like transportation, public health, criminal justice, and social equity.

0101	Christopher Dempwolf M 4:00pm - 6:40pm	Seats (Total: 30) Location: TBA

URSP709 **Field Instruction**

Credits: 3 Grading Method: Regular, Audit

Students will satisfy a 300-hour internship (20 hours for 15 weeks during the spring, 25 hours a week for 12 weeks during the summer). Suitable internships are approved by the Internship Coordinator or Instructor; they involve a significant amount of planning work (preferably in the student's are of interest) and provide an appropriate on-site supervisor. The Internship Coordinator will assist students in finding a suitable internship, but the ultimate responsibility rests with each student. Whether the internship is paid or not is a matter to be worked out between the student and the organization.

Prerequistes: URSP600, URSP604, URSP605 or permission of the department.

0101	Casey Dawkins Contact instructor or department for details.	Seats (Total: 10)
1001	Gerrit Knaap Contact instructor or department for details.	Seats (Total: 5)
1201	Chengri Ding Contact instructor or department for details.	Seats (Total: 5)
1401	Marccus Hendricks Contact instructor or department for details.	Seats (Total: 5)
1501	Ariel Bierbaum Contact instructor or department for details.	Seats (Total: 5)

1601	Hiroyuki Iseki Contact instructor or department for details.	Seats (Total: 5)
1701	Casey Dawkins Contact instructor or department for details.	Seats (Total: 5)
2103	Willow Lung Amam Contact instructor or department for details.	Seats (Total: 5)

URSP788 **Independent Study in Urban Studies and Planning**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Directed research and study of selected aspects of urban affairs.

Contact department for information to register for this course.

URSP798 **Readings in Urban Studies and Planning**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Directed readings in selected aspects of urban affairs and planning.

Contact department for information to register for this course.

URSP799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

URSP805 **Seminar in Research Design**

Credits: 3 Grading Method: Regular

Prerequisite: URSP804 and URSP810.

Addresses fundamental aspects of research desing for Ph.D students in urban planning and policy-related fields. Topics include principles of research design, formulating a feasible hypothesis and identifying appropriate methodology for testing hypotheses eg. qualitative methods, quantitative methods, survey research. Writing of proposals and dissertation. Publication, presentation, and funding.

0101	Sevgi Erdogan Th 1:00pm - 3:30pm	Seats (Total: 15) ARC 1119

URSP898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Sat-Fail

Selected topics in Urban Studies and Planning. Topics will vary with the instructor.

Contact department for information to register for this course.

URSP899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

This course is a required course for the Ph.D program in Urban and Regional Planning and Design.

Contact department for information to register for this course.

USLT Latina/o Studies Spring 2019

USLT202 **US Latina/o Studies II: A Contemporary Overview 1960's to present**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB, D

Interdisciplinary course on emerging populations of Latinos in the 20th century with a focus on the multiple waves of latino immigration as a result of neocolonialism, imperialism, globalization and transnationalism. Examines the positioning of immigrant waves in the political, sociocultural and historical contexts of US Latinidades.

0101	Robert Chester	Seats (Total: 30)
	TuTh 9:30am - 10:45am	TWS 0328

USLT488B **US Latina/o Senior Seminar**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A variable topics seminar that exposes students to interdisciplinary critical readings, writings, and research in U.S. Latina/o Studies. Interdisciplinary research methodologies are broadly addressed. Students will gain skills and practice in reading critical analytic texts and will develop writing skills.

A variable topics seminar that exposed students to interdisciplinary critical readings, writings, and research in U.S. Latina/o Studies. Interdisciplinary research methodologies are broadly addressed. Students will gain skills and practice in reading critical analytic texts and will develop writing skills.

0101	Nancy Mirabal	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	TWS 0134

USLT498C **US Latina/o Studies: Special Topics; Race and Nation in Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Specific content to be announced when courses are offered.

Also offered as AMST498P. Credit only granted for USLT498C or AMST498P.

0101	Robert Chester	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	WDS 1114

USLT498O **US Latina/o Studies: Special Topics; Queer and Feminist Thought in Latina/o America**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Specific content to be announced when courses are offered.

Also offered as LGBT448O. Credit only granted for USLT498O or LGBT448O. This course will investigate how queer and feminist subjects in Latin America and the Latina/o U.S. engage questions of gender and sexuality, and also politics and culture. Using thought as our framework, we will use an expansive lens to understand how thinking is also a way of doing across a range of activities, from theoretical texts to activist movements to artistic practices and more. We will read foundational work from thinkers such as Gloria Anzaldu a, Rigoberta Menchu, Jose Esteban Munoz, Juana Maria Rodriguez, and others. We will also read novels and poetry from writers including Raquel Gutierrez, Justin Torres, and Myriam Gurba. This course will also focus on performance and contemporary art practices to help us illuminate the many complexities of thinking gender and sexuality across the Americas. All texts will be read in English, no previous knowledge of Spanish required.

0101	Ivan Ramos	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	WDS 1114

VMSC Veterinary Medical Sciences Spring 2019

VMSC688A **Special Topics in Veterinary Medical Sciences; Advances in Reverse Genetics of Animal Viruses**

Credits: 1-4 Grading Method: Regular

Lectures and discussions on current topics in veterinary medicine s as animal disease surveillance, risk analysis, molecular epidemiolo or fish pathology. Targeted at veterinary medicine (DVM) students a other graduate students with a background in veterinary medical sciences.

0101	Siba Samal	Seats (Total: 10)
	Contact instructor or department for details.	

VMSC698 **Seminar in Veterinary Medical Science**

Credits: 1 Grading Method: Regular

Presentation and discussion of scientific publications, current topics and new methodologies related to veterinary medical sciences.

0101	Shin-Hee Kim Th 11:00am - 12:00pm Contact instructor or department for details.	Seats (Total: 20) Location: TBA

VMSC699 **Special Problems in Veterinary Medical Sciences**

Credits: 1-4 Grading Method: Regular

Independent study of a specific problem related to veterinary medicine such as a disease outbreak, application of a new diagnostic test or a risk analysis related to animal health. Targeted at veterinary medicine (DVM) students and other graduate students with a background in veterinary medicine.

Contact department for information to register for this course.

VMSC700 **Animal Health Policy and Communication**

Credits: 3 Grading Method: Regular, Audit

Recommended: ANSC225 and ANSC340. Restriction: Must be in a major in AGNR-VA-MD Regional Col Veterinary Med; or must be in a major within the AGNR-Animal & Avian Sciences department; or must be in a major in PUAF-School of Public Policy; or permission of AGNR-VA-MD Regional Col Veterinary Med.

An introduction to animal health policy with emphasis on understanding how science and politics interact and influence animal health policy and how veterinarians and animal scientists can effectively communicate science to non-scientists such as legislators and policymakers.

0101	Nathaniel Tablante TuTh 9:30am - 10:45am	Seats (Total: 10) ANS 0402

VMSC720 **Viral Pathogenesis**

Credits: 2 Grading Method: Regular, Audit

Restriction: Permission of instructor.

This course will teach graduate students about mechanisms of infections by animal and human viral pathogens, including virus-cell interactions, host responses, and consequences of virus infection. Particular attention will be focused on the molecular mechanisms of the interactions between virus and host.

0101	Yanjin Zhang F 10:00am - 11:50am	Seats (Total: 20) Location: TBA

VMSC780 **Parasites of Medical and Veterinary Importance**

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Permission of instructor.

Provides students with the basic knowledge of parasites as well as research advancement in important parasites of humans and animals. Particular attention will be given to parasite biology, pathogenesis, and host responses to parasitic infection. A selection of parasites of medical and veterinary importance will be specifically covered with emphasis on recent research breakthroughs in the field.

Contact department for information to register for this course.

VMSC799 **Thesis Research**

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

VMSC898 **Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

VMSC899 **Dissertation Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

WMST Women's Studies Spring 2019

Both WMST 200 and 250 serve as introductory courses for WMST and may be required before taking some advanced courses with a WMST prefix.

WMST200 **Introduction to Women's Studies: Women and Society**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB, D General Education: DSHS, DVUP

An interdisciplinary study of the status, roles, and experiences of women in society. Sources from a variety of fields such as literature, psychology, history, and anthropology, focusing on the writings of women.

0101	Damien Hagen TuTh 8:00am - 9:15am	Seats (Total: 25) WDS 0104
0201	Damien Hagen TuTh 12:30pm - 1:45pm	Seats (Total: 25) JMZ 0208

WMST211 **Women in America Since 1880**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: SH, D	General Education: DSHS, DVUP

Also offered as: HIST211. Credit only granted for: HIST211 or WMST211.

An examination of women's changing roles in working class and middle class families, the effects of industrialization on women's economic activities and status, and women's involvement in political and social struggles, including those for women's rights, birth control, and civil rights.

0101	Katarina Keane TuTh 11:00am - 11:50am W 10:00am - 10:50am	Seats (Total: 20) KEY 0106 KEY 0100	Discussion
0102	Katarina Keane TuTh 11:00am - 11:50am W 11:00am - 11:50am	Seats (Total: 20) KEY 0106 KEY 0100	Discussion
0103	Katarina Keane TuTh 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 20) KEY 0106 KEY 0100	Discussion
0104	Katarina Keane TuTh 11:00am - 11:50am W 2:00pm - 2:50pm	Seats (Total: 20) KEY 0106 KEY 0123	Discussion

WMST250 **Introduction to Women's Studies: Women, Art and Culture**

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HA, D	General Education: DSHU, DVUP

An examination of women's creative powers as expressed in selected examples of music, film, art, drama, poetry, fiction, and other literature. Explores women's creativity in relation to families, religion, education, ethnicity, class, sexuality, and within a cultural tradition shaped by women.

0301	Tangere Hoagland TuTh 11:00am - 12:15pm	Seats (Total: 30) HBK 0115	
0701	Amira Lundy-Harris TuTh 9:30am - 10:45am	Seats (Total: 25) JMZ 1215	
0901	Amira Lundy-Harris TuTh 12:30pm - 1:45pm	Seats (Total: 25) SYM 0209	

0902	Lenora Knowles MWF 2:00pm - 2:50pm	Seats (Total: 25) SQH 1123	
0903	Lenora Knowles MWF 11:00am - 11:50am	Seats (Total: 25) HBK 0123	
1301	Melissa Stevens TuTh 3:30pm - 4:45pm	Seats (Total: 25) KEY 0126	
1401	Michele Prince TuTh 5:00pm - 6:15pm	Seats (Total: 45) SQH 1117	
1501	Clara Montague TuTh 11:00am - 12:15pm	Seats (Total: 25) CHM 1224	
1601	Clara Montague TuTh 2:00pm - 3:15pm	Seats (Total: 25) ASY 3211	
2001	Michelle Rowley MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) TWS 1100 KNI 1105	Discussion
2002	Michelle Rowley MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) TWS 1100 CHE 2116	Discussion
2003	Michelle Rowley MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) TWS 1100 MTH 1311	Discussion
2004	Michelle Rowley MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) TWS 1100 EGR 2154	Discussion

WMST255 **Reading Women Writing**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU, DVUP

Also offered as: ENGL250. Credit only granted for: ENGL250 or WMST255.

Explores literary and cultural expressions by women and their receptions within a range of historical periods and genres. Topics such as what does a woman need in order to write, what role does gender play in the production, consumption, and interpretation of texts, and to what extent do women comprise a distinct literary subculture. Interpretation of texts will be guided by feminist and gender theory, ways of reading that have emerged as important to literary studies over the last four decades.

0201	Manon Soulet	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	KEY 0102

WMST265 **Constructions of Manhood and Womanhood in the Black Community**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HO, D | General Education: DSHS, DVUP

Investigates the ways that African Americans are represented and constructed in public and private spheres and explores the social constructions and representations of Black manhood and womanhood from various disciplinary perspectives.

Also offered as AASP298B. Credit granted for WMST265 or AASP298B.

0101	Dennis Doster	Seats (Total: 30)
	W 4:00pm - 6:30pm	KEY 0125

WMST269G **Special Topics in Study Abroad II; Topics on Gender Studies**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

WMST269I **Special Topics in Study Abroad II; Social Problems: Women's Issues in Indian Society**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

WMST269R **Special Topics in Study Abroad II; Making Gender, Sexuality and Race**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

WMST269W **Special Topics in Study Abroad II; Social Problems: Women's Issues Field Study**

Credits: 1 | Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

WMST275 **World Literature by Women**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HL, D | General Education: DSHU, DVUP

Also offered as: CMLT275. Credit only granted for: WMST275 or CMLT275.

Comparative study of selected works by women writers of several countries, exploring points of intersection and divergence in women's literary representations.

0101	Norrell Edwards TuTh 12:30pm - 1:45pm	Seats (Total: 30) JMZ 0205
0201	Sarah Humud MWF 10:00am - 10:50am	Seats (Total: 30) KEY 0121

WMST298D **Women's Bodies in Contention**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit | CORE: HA, D | General Education: DSHS, DVUP, SCIS

1001	Jessica Mathiason MWF 2:00pm - 2:50pm	Seats (Total: 30) JMZ 2207
1002	Jessica Mathiason MWF 11:00am - 11:50am	Seats (Total: 30) SQH 1103

WMST298J **Special Topics in Women's Studies; Gender & Body in Iran**

Credits: 3 | Grading Method: Regular, Pass-Fail, Audit

Also offered as PERS252. Credit only granted for: PERS298A, PERS252, or WMST298J. Formerly: PERS298A. Multidisciplinary approach to key topics concerning gender and body in Iran, to include insights from religion, history, sociology, anthropology, disability studies, travel literature,arts, and fashion. Taught in English.

0101	Ida Meftahi MW 2:00pm - 3:15pm	Seats (Total: 30) HBK 1108

WMST298T **Special Topics in Women's Studies; Gender and Sexuality in Israeli Cinema**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DVUP

Also offered as ISRL249K, FILM298K, JWST219B, and LGBT298T. Credit only granted for ISRL249K, JWST219B, FILM298K, WMST298T, or LGBT298T. This course will explore the different ways gender and sexuality have been represented in Israeli Cinema over time. We will examine notions of "manhood" and "womanhood" within the Israeli social context, as well as look at examples of outliers, exceptions, transgressors, and pariahs. We will investigate different types of representations of gender and sexuality, asking how they configure secular society, the Orthodox/ Haredi religious community, the LGBTQ community, the Arab/Palestinian communities, the Israeli soldier population, and more.

0101	Shalom Rosenberg TuTh 3:30pm - 4:45pm	Seats (Total: 25) TWS 1321

WMST325 **The Sociology of Gender**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Prerequisite: 3 credits in SOCY courses. Also offered as: SOCY325. Credit only granted for: SOCY325 or WMST325.

Institutional bases of gender roles and gender inequality, cultural perspectives on gender, gender socialization, feminism, and gender-role change. Emphasis on contemporary American society.

0101	Lester Andrist MWF 12:00pm - 12:50pm	Seats (Total: 60) ASY 2309

WMST336 **Psychology of Women**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DSHS

Prerequisite: PSYC100. Also offered as: PSYC336. Credit only granted for: PSYC336 or WMST336.

A study of the biology, life span development, socialization, personality, mental health, and special issues of women.

Restricted to WMST or PSYC undergraduate students only.

0101	Jennifer Brady MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 110) BPS 1243 ONLINE

WMST350 **Feminist Pedagogy**

(Perm req)

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-Women's Studies department.

General application of feminist methodology to teaching and communication skills, teaching strategies, motivation, classroom dynamics and knowledge of students' development and learning styles.

Contact department for information to register for this course.

WMST369B **Special Topics in Study Abroad III; Spanish and Basque Gender Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

WMST369L **Special Topics in Study Abroad III; Women and Society: Latin American Perspectives**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

WMST379B **Topics in Women's Studies; Honors Thesis Writing II**

(Perm req)

Credits: 3 Grading Method: Regular

Thematic exploration of a topic in women's studies.

0101	Ruth Zambrana Contact instructor or department for details.	Seats (Total: 1)

WMST379C **Topics in Women's Studies; Politics of Transnational Adoption: Intersectional Analysis of Class, Race, Gender and Nationality**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Thematic exploration of a topic in women's studies.

Also offered as AAST398C. Credit only granted for WMST379C or AAST398C. In this course we will examine the political, economic, and cultural impetus and the consequences of the movement of children across national borders from diverse perspectives. By considering racial, class, gender, and national hierarchies at the global scale, we will explore the factors that have maintained transnational adoption between South Korea and the United States for over sixty years. We will also examine the causes, processes, and results of transnational adoption between China and the United States.

0101	Sina Lee	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	ASY 3215

WMST379Q **Topics in Women's Studies; Queer History of Classics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Thematic exploration of a topic in women's studies.

Also offered as CLAS309Q, HIST328Q, and LGBT398Q. Credit granted for CLAS309Q, HIST328Q, WMST379Q, and LGBT398Q. In Classics and Queer History, we will explore ancient and modern paradigms of sex, gender, and sexuality and discuss queer uses of and struggles with the past and the idea of the Classical. To do this, we will examine diverse works of ancient Greek and Roman literature and visual art, as well as works from later periods sonnets, operas, novels, films, scholarship, and more that adapt ancient stories and ideas for their own, queer purposes. As we move across time, geography, and cultures, we will keep in mind the over-arching questions, what is queer history, and why might one pursue it?

0101	Robert Matera	Seats (Total: 30)
	MWF 2:00pm - 2:50pm	VMH 1207

WMST386 **Experiential Learning**

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail

Restriction: Must have Learning Proposal approved by Women's Studies Academic Advisor; and junior standing or higher.

Contact department for information to register for this course.

WMST400 **Theories of Feminism**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: 1 course in WMST; or must have completed a course cross-listed with a WMST course.

A study of the multiplicity of feminist theories which have been developed to explain women's position in the family, the workplace, and society. Major feminist writings are considered in the context of their historical moment and in the context of the intellectual traditions to which they relate.

0101	Sydney Lewis	Seats (Total: 30)
	MW 2:00pm - 3:15pm	SKN 1115

WMST428J **Topics in Women's Studies; Black Feminist Science Studies**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Thematic exploration of a topic in women's studies.

We will examine the ways in which scientific knowledge has historically been shaped by cultural ideas of race and gender and how black feminist approaches to science offer alternative modes of knowledge production. We will explore the history of scientific racism, eugenics, the Black Women's Health Imperative, the search for African roots using direct- to-consumer genealogy testing, and contemporary case studies on gendered and racialized medicine in the fields of genomics, pharmacology, assisted reproduction.

0101	Jessica Mathiason	Seats (Total: 30)
	MW 3:30pm - 4:45pm	TYD 0111

WMST452 **Women in the Media**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DVUP

Also offered as: JOUR452. Credit only granted for: JOUR452 or WMST452.

Participation and portrayal of women in the mass media from colonial to contemporary times.

0101	Renee Poussaint	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	KNI 1103

WMST469G **Study Abroad Special Topics IV; Gender Studies: A Global Perspective**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

WMST469M **Study Abroad Special Topics IV; Sociology, Gender and Indigenous Beliefs in Mexican Cultures**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program

Contact department for information to register for this course.

WMST471 **Women's Health**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D

Restriction: Must be in a major within ARHU-Women's Studies department; or must be in a major within SPHL-Behavioral & Community Health department. Also offered as: HLTH471. Credit only granted for: HLTH471 or WMST471.

The women's health movement from the perspective of consumerism and feminism. The physician-patient relationship in the gynecological and other medical settings. The gynecological exam, gynecological problems, contraception, abortion, pregnancy, breast and cervical cancer and surgical procedures. Psychological aspects of gynecological concerns.

Restriction: Must be in a major within SPHL-Behavioral & Community Health department; or must be in a major within ARHU-Women's Studies department. Also offered as HLTH471. Credit granted for HLTH471 or WMST471.

0101	Kirsten Stoebenau	Seats (Total: 30)
	MWF 10:00am - 10:50am	SPH 1303
	Restriction: Must be a major in Behavioral and Community Health department; or must be in a major within ARHU-Women's Studies department.	

WMST488X **Senior Seminar; Feminist Conflict**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Seminar for advanced majors in women's studies or other students with appropriate preparation. Interdisciplinary topics will vary each semester.

Why can't we all just get along? This seminar will offer an opportunity to delve into the history, and the present, of conflict and disagreement within feminist movements including the ongoing legacy of the 1980s clashes over porn and BDSM known as the sex wars, women of color and trans critiques of white cis feminist exclusion, and responses to abuse within social justice movements. Rather than seeing conflict as a failure to achieve goals of unity and progress, we will take feminisms fractures a nd disputes as opportunities to study how power and difference operate in struggles for social transformation. We will also ask what it might mean for conflict itself to be feminist. How can we apply feminist principles of justice and care in the most fraught situations, without eliding the structural issues that lead conflicts to develop?

0101	Alexis Lothian	Seats (Total: 12)
	Th 3:30pm - 6:00pm	TLF 0135

WMST498L **Advanced Special Topics in Women's Studies; Women in Israel**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

WMST499 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail

Research and writing or specific readings on a topic selected by the student and supervised by a faculty member of the Women's Studies Department.

Contact department for information to register for this course.

WMST602 **Approaches to Women's Studies II**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: WMST400; or students who have taken courses with comparable content may contact the department.

Continued examination of intersectionality and interdisciplinarity with emphasis on the politics of knowledge production and identity.

0101	Elsa Barkley Brown	Seats (Total: 12)
	Th 4:00pm - 6:30pm	WDS 2101R

WMST618 **Feminist Pedagogy**

(Perm req)

Credits: 3 Grading Method: Regular

Examines the higher education classroom from a feminist perspective through theory and analysis. Students are graduate teaching assistants with the Women's Studies department.

0101	Michelle Rowley	Seats (Total: 4)
	Contact instructor or department for details.	

WMST619 **Women's Studies Teaching Practicum**

(Perm req)

Credits: 1 Grading Method: Regular

Provides Women's Studies graduate teaching assistants with ongoing regular faculty supervision during the semesters the students are teaching WMST courses.

0101	Alexis Lothian	Seats (Total: 10)
	Contact instructor or department for details.	

WMST621 **Feminist Theories and Women's Movements: Genealogies**

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: WMST400; or permission of ARHU-Women's Studies department.

Examines theories to explain the matrix of domination from the nineteenth century to the present. Students learn the key debates that produceed new insights and shifted the ground of subsequent feminist theorizing within multi-racial feminisms. Examines those debates within global perspectives. Examines how dominant theoretical frameworks have been developed at specific historical moments.

0101	Ashwini Tambe	Seats (Total: 12)
	W 4:00pm - 6:30pm	WDS 2101R

WMST628 **Women's Studies Colloquium**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

An intensive advanced exploration of current problems and issues in women's studies.

For WMST students only.

0101	Ashwini Tambe	Seats (Total: 20)
	Contact instructor or department for details.	

WMST699 **Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Research and writing on specific readings on a topic selected by the student which is approved and supervised by a faculty member of the Women's Studies Department.

Contact department for information to register for this course.

WMST709 **Directed Independent Reading for Major Field Exam**

(Perm req)

Credits: 1-4 Grading Method: Sat-Fail

Directed reading in preparation for Major Field Exam. In consultation with their advisors, students identify, analyze, critique and synthesize material relevant to their major fields of inquiry. Grading will be based on combinations of oral performance in the bi-weekly meetings, production of annotated bibliographies and synthetic papers.

Contact department for information to register for this course.

WMST799 **Masters Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

WMST898 **Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

WMST899 **Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.